

NEIGHBORHOOD ANALYSIS

Locating Neighborhood Boundaries and Measuring

Neighborhood Change

by

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## ABSTRACT

Many actors in both the public and private sectors make important decisions based on their perception of the changes occurring in that geographic unit commonly referred to as a neighborhood. The process of locating the boundaries of a neighborhood and measuring the direction and rate of change in various characteristics of the neighborhood is formally known as neighborhood analysis. Although a large amount of scholarly literature in the fields of sociology, demography, economics, and city planning have posited both definitions of "neighborhood" and theories of neighborhood change, there is no clearly delineated methodology for locating neighborhood boundaries and measuring neighborhood change. The purposes of this study are: 1) to determine whether the geographic unit under analysis differs with the criteria selected for locating neighborhood boundaries; 2) to determine whether the process of neighborhood change would appear different if a different set of measures are monitored by separate actors; 3) to explore the process of neighborhood analysis and note the difficulties and potential sources of error one faces in carrying it out.

In the first of the two sections of this study, the many varied definitions of "neighborhood" that have appeared in the literature are reviewed within the context of a typology of neighborhood definitions based on the relative emphasis placed on each of the three critical elements of a neighborhood, the people, the housing, and the environment. A set of criteria for locating neighborhood boundaries is then extracted from each of these theoretical definitions. These operational definitions are then applied to a case study area, the Jamaica Plain section of Boston, to determine whether the geographic configuration of a neighborhood differs with the definition used.

The purpose of the second section is to identify indicators of neighborhood change and to determine whether different indicators all point in the same direction, at the same rate, and in a discernable sequence within a neighborhood. The major theories of neighborhood change are reviewed, specifically those theories dealing with the processes of mobility, filtering, and deterioration. A methodology is then established for monitoring the process of neighborhood change through the use of measurable indicators. Finally, these indicators of change are applied to Jamaica Plain to determine whether the various indicators provide the same findings.

The various criteria for locating neighborhood boundaries were found to delineate roughly the same geographic areas. The scale of these areas, however, was far smaller than the Jamaica Plain neighborhood, which is primarily an administrative and historical construct. The indicators of neighborhood change do generally move in the same direction, but not at a uniform rate with respect to the changes occurring in Boston as a whole. Geography, topography and history all play an important role in the location of neighborhood boundaries and in the way in which a neighborhood changes.

The major methodological difficulties encountered in conducting a neighborhood analysis are data limitations. The census is only published at ten year intervals and census tracts define the geographic areas one may analyze. In addition, city agencies do not publish disaggregated data. Other problems requiring further research are: an operational notion of homogeneity and a threshold level for neighborhood change.

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### Introduction

It is not unusual to hear people, in both professional and non-professional capacities, speak of neighborhoods and neighborhood change. An individual involved in developing social policy may espouse the goal of "neighborhood stability." A banker may grimace at the news of "neighborhood decline." A savvy realtor may accrue large profits from his participation in the "rediscovery of an old neighborhood." The white homeowner often fears the encroachment of a different racial group, or "neighborhood transition." The Federal Government has appropriated large sums of money for "neighborhood renewal."

Two concepts are central to each of these concerns, 1) the neighborhood and 2) the process under which a neighborhood changes. These two concepts are rarely defined when they are used. This is the case when either of the two concepts appears in everyday conversation, in formal discussions, or even in legal documents. Let us now look more closely at several ways in which each of these two concepts, the neighborhood and neighborhood change, have been used.

The term, neighborhood, has been bantered around in the most informal and the most formal settings without being defined in either case. Many people shop at the neighborhood grocery store or spend an evening at the neighborhood movie theater. Some people live in fear of the neighborhood gang or have been the focus of the neighborhood grapevine. Although people rarely stop to define what they mean by each of these phrases, they each have an intuitive meaning to the user.

In the most formal setting, the neighborhood has been the focal point of federal

legislation. According to the Demonstration Cities Act of 1966,

A "comprehensive city demonstration program" is a locally prepared and scheduled program for rebuilding or restoring entire sections and neighborhoods of slum and blighted areas through the concentrated and coordinated use of all available Federal aids and local private and government resources.....<sup>1</sup>  
(emphasis my own)

Here, the neighborhood is the target area of a piece of major legislation, yet nowhere in the legislation is the term neighborhood actually defined, either theoretically or operationally.

Similarly, in the Housing Act of 1954, the requirements of a workable program and neighborhood analysis were added to the Urban Renewal Program. Yet again, the concept of neighborhood was not explained. Under the Community Action Program (CAP) of the Economic Opportunity Act, neighborhood service centers were funded. It is, however, not totally clear, what jurisdiction such a center was intended to serve.

In each of these three cases, the criteria according to which a neighborhood was to be identified was left up to those implementing the program. The local agencies could then select a neighborhood according to any number of different criteria or different purposes.

In the opening statement, we listed some examples of the second concept to be analyzed, neighborhood change. Again, there is a dilemma. The concept, neighborhood change, strikes a nerve in everyone, yet there is no single clearly defined scheme as to how, why and in what ways neighborhoods undergo change.

Neighborhood change is composed of two confusing elements; first, the neighborhood

which we have just discussed above and second, the concept of change. Change is a process and has a direction. Neighborhoods are often called transitional as they move from one type of neighborhood to a different type of neighborhood. But what exactly is it about the neighborhood that changes? How does one measure the direction and magnitude of that change?

So far, we have only discussed problems of definition, but we are not concerned with merely a semantic argument. Many important decisions are based on what people believe is meant by neighborhood and how they view neighborhood change, that is how they analyze a neighborhood. Federal legislation has been enacted to reverse neighborhood decline, lenders assess neighborhoods in terms of risk potential, and people search for a "nice, stable neighborhood" in which to live. Because a notion of neighborhood and a concern about neighborhood change are built into so many decisions, it is important to have a clearly defined framework for both of these concepts.

Many actors in both the private and the public sectors make decisions based on neighborhoods and make decisions which affect neighborhoods. In the private sector, the most important actors are: 1) households, 2) private investors, 3) financial institutions, 4) realtors, and 5) commercial establishments. The primary actors in the public sector are: 1) politicians, 2) public administrators, and 3) planners. To further emphasize the importance of the concepts of neighborhood and neighborhood change in so many realms, we shall now briefly look at some of the ways in which each actor's decisions depend on his evaluation of a neighborhood and on his evaluation of the changes occurring in a neighborhood. Let us begin with those actors involved in decisions in the private sector.

When a household chooses a home, it also chooses a whole bundle of services. Some of these services flow from the structure itself, others are a function of the location of the structure. Among the factors that enter into a household's locational decision calculus are: convenience to work, appearance of the neighborhood, safety, the characteristics of their potential neighbors, and the quality of the other houses in the neighborhood. People are also concerned with the direction in which the neighborhood seems to be moving: are the other houses being cared for? is a different class of people moving in? is the school maintaining adequate standards? Depending on each household's own values it will look for different qualities in a neighborhood and ask different questions concerning the existence of and types of changes occurring within the neighborhood.

The second actor, the private investor, in particular, the real estate investor is very sensitive to neighborhood conditions and neighborhood changes. Like the household investing in a home, the real estate investor is also concerned with the combination of the structure and its location in space. With profit maximization as his goal, the investor is primarily concerned with making financially sound investments. Because the neighborhood influences the desirability of his structure, the rents he can demand, and his operating costs, the investor will carefully evaluate the neighborhood and its future before investing in additional properties or making improvements in properties he already holds in that neighborhood.

The financial institutions, the third actor, determine the availability and terms of mortgage funds for the purchase and repair of real estate. Like the investor, the lender is extremely concerned with making a "safe" investment. He tries to avoid bad loans



which may end in foreclosure and thus a loss to his institution. Neighborhoods which are seen by lenders as declining are often "red-lined." This means that loans will no longer be available in that particular location. This practice can have a tremendous impact on the neighborhood. People will have great difficulty selling their homes. Often, only large investors will have adequate credit ratings to purchase in the area, increasing the level of absentee ownership in a previously predominantly owner occupied area. Withdrawal of credit is also a statement of the institution's attitude toward the neighborhood and influences the neighborhood's public image and relative desirability.

The fourth actor, the real estate broker, matches housing units with households or investors. His estimation of and his expectations concerning the type of people, the level of services, the quality of housing, and the general environment of a neighborhood influences the type of people to whom he will show homes in a given neighborhood. If, for example, a neighborhood has begun to experience racial change, a realtor may only show units to members of the new racial group, further encouraging what he saw as the trend in that neighborhood.

The locational decision of the fifth actor, the commercial establishment, is based on a number of neighborhood-related factors. Among these are: access to resources, the costs of doing business in a particular location and an estimate of the potential market area. That market area surrounding a commercial site, loosely defined, is a neighborhood composed of people with particular tastes and level of purchasing power. An understanding of the shopping and mobility behavior of the population and their financial standing are then critical to a locational decision. Any change in these aspects of the neighborhood

population would have an impact on the local commercial trade. Conversely, the quality of commercial establishments contributes to a neighborhood's image and influences who will choose to live in or invest in that neighborhood.

As is clear from the above examples, whether implicitly or explicitly, many people in their private and professional lives make decisions that depend on their analysis of neighborhoods. That is, they selectively bound a subarea of the city and assess its dynamics on the basis of those characteristics relevant to their own decisions.

In addition, the actions and decisions of these individuals influence what happens in cities and also influences the decisions of each of the other actors. If, for example, a property owner, on the basis of his evaluation of neighborhood circumstances, were to choose to curtail investment on his buildings in a particular neighborhood, the quality of his structures would decline, reducing the quality standard for the entire neighborhood. This also provides a clue to other investors that he is dissatisfied with the neighborhood, thus discouraging them from investing as well.

Many decisions made by the public sector, whether they be political decisions, distributional decisions, or planning decisions rely on both a notion of neighborhood and an evaluation of the dynamics of neighborhood change. As noted previously, many federal, state, and local programs have had as their goal the correction of urban problems at the neighborhood scale. Public Housing and Urban Renewal have sought to correct housing problems and to improve the physical environment in specific areas of many cities. Model Cities was a more comprehensive and focused effort to improve neighborhood conditions. The Community Action Programs were still further efforts to improve living conditions for

people in low-income areas of the city.

However, often, over-riding market, demographic, and social forces have overwhelmed isolated public efforts to improve neighborhood conditions. In the case of Project Rehab, the isolated renovation of structures in otherwise declining neighborhoods was not an adequate measure to either reverse the neighborhood trends nor to even maintain the rehabilitated units. Code enforcement, a program often administered at the city level to prevent further housing deterioration, may have disastrous effects in a weak market where the demand for housing is not sufficient to warrant private investment in housing maintenance and rehabilitation.

We believe that more precise definitions of neighborhood and neighborhood change will lead to better public policy planning. Currently, this is most relevant at the local level in the allocation decisions for Community Development Revenue Sharing funds. An understanding of the components of the city and how they interact will help decision-makers choose the best locations for intervention and help them design the correct types of intervention policies and programs to meet specific problems.

Let us now take a brief look at the three public sector actors whose decisions influence neighborhoods and are influenced by the characteristics and dynamics of neighborhoods. First, are the politicians. For our purposes, they are the elected officials responsible for initiating and approving public policies. They are concerned with both promoting their political career and serving the city. The politician sees neighborhoods and their residents as potential sources of votes as well as sections of the city and groups of people with specific needs. His evaluation of the support he expects from a group of voters, his

perception of their neighborhood conditions, and his own values influence what programs he will choose to support. The politician's support or lack of support for programs which serve special interest groups or particular neighborhoods will in turn influence both his political career and the future of a given neighborhood. In either case, his understanding of the impact of a program at the neighborhood level will help him make policy decisions,

Public services are generally delivered by districts. Most important among the services are refuse collection, fire protection, police protection and education. The algorithm by which resources are allocated to different neighborhoods by our second public actor, the public administrator, is rarely publicized. The level of services provided to a neighborhood does, however, influence its relative appeal. It is commonly believed that a neighborhood that is seen as going "downhill" by public decision-makers will also face a reduction in municipal services, while more resources are channelled into the more prestigious areas in an attempt to help stabilize these areas. The level of public investment in a neighborhood influences the direction in which a neighborhood moves. The way in which those who allocate services and resources see neighborhood change then, has an influence on future change.

The third and final public actor is the policy planner. His role is to evaluate urban problems and design programs to rectify these problems within the political and financial constraints imposed upon him. Cities are composed of subareas with various needs and problems. The policy planner tries to understand the impact of a proposed program on different types of subareas. For example, a city-wide code enforcement program will effect different subareas differently. In a very low-rent, deteriorated area, owners may

abandon their structures rather than invest to maintain them. Code enforcement may, however, protect a more stable area from decline. The policy planner must be able to mold programs to the dynamics of specific subareas.

In addition to these common uses of the concepts, neighborhood and neighborhood change, there is also a large body of theoretical literature which focuses on them as well. Sociologists, geographers, demographers, economists, and city planners have all addressed themselves to these two notions within the context of their own need to define and use them. This has yielded a wide range of definitions of a neighborhood from a geographic unit in which people provide each other with mutual support and comfort, to a district with similarly priced housing, and finally to a visually distinct subdivision. Different aspects of the neighborhood have also been stressed in the various theories of neighborhood change. Most commonly cited are: racial change, housing deterioration, and environmental decay.

There is no clear methodology for locating neighborhood boundaries or for evaluating neighborhood change, neither in the literature nor in common usage. The purposes of this study are threefold. We want to first determine whether the geographic unit under analysis differs with the criteria selected for locating neighborhood boundaries. Second, we would like to determine whether the process of neighborhood change would appear different if a different set of measures are monitored by separate actors. If variations are found across criteria and indicators of change, the selection of criteria and indicators of change is critical to the outcome of the neighborhood analysis. Our third purpose is to explore the actual process of neighborhood analysis and the difficulties and potential

sources of error one faces in carrying it out.

This study is divided into two sections. The first focuses on the neighborhood as a spatially defined unit and the second is directed toward measuring neighborhood change. The purpose of the first part is to clarify the various concepts of neighborhood. We shall determine what criteria one may use to locate the boundaries of a neighborhood under various definitions and note the problems involved in such an under-taking. The application of the various concepts of neighborhood to a case study area will reveal the potential spatial variations that could result from using varying criteria for locating neighborhood boundaries.

In Chapter 1, a typology of neighborhoods is developed to serve as an organizational framework within which the literature dealing with neighborhood definitions is reviewed. In Chapter 2, the criteria for locating neighborhood boundaries are extracted from each of the theoretical definitions discussed in the first chapter. These operational definitions are applied to the Jamaica Plain section of Boston, our case study area, in Chapter 3. In this third chapter, Jamaica Plain is evaluated as a neighborhood and subareas within Jamaica Plain are identified using each of the operational definitions. We may then determine whether the geographic configuration of a neighborhood differs with definition. We may also evaluate the sources of data and research techniques currently available to the neighborhood analyst.

Jamaica Plain was selected as the case study area because it is neither clearly homogeneous, uniquely stable nor topographically discrete. Yet, it is not a totally heterogeneous neighborhood nor a neighborhood undergoing radical changes. From an

initial investigation, Jamaica Plain appeared to be centrally located on a continuum from homogeneous to heterogeneous and from stable to transitional. Jamaica Plain contains several different types of population groups and housing submarkets and is undergoing gradual changes. For these reasons, we believed it would serve as both a useful and interesting study area.

The purpose of Part II is to identify indicators of neighborhood change, and to determine whether different indicators all point in the same direction, at the same rate, and in a discernable sequence, within a neighborhood. Again, as in Part I, we are in addition searching for a methodology for measuring neighborhood change. While recognizing that neighborhoods change as a result of forces acting on the neighborhood itself and larger forces acting on the city or region, in this study, we are not looking at the causes of neighborhood change. We are instead, focusing only on the indicators of neighborhood change which are apparent in the neighborhood itself.

Chapters 4 through 6 follow a similar format to the first three chapters. Chapter 4 is a review of the literature on theories of neighborhood change organized according to the emphasis placed on each of the neighborhood element. In Chapter 5, a methodology is established for monitoring the process of neighborhood change through the use of measurable indicators. In Chapter 6, these indicators of change are applied to Jamaica Plain to determine whether the various indicators provide the same findings.

In our concluding chapter, Chapter 7, we review the analysis, the resultant findings, and the difficulties involved in conducting a neighborhood analysis.

**Footnotes: Introduction**

- 1. Demonstration Cities and Metropolitan Development Act of 1966, Title I, November 4, 1966.**



## Part I: Neighborhoods

### Chapter 1: How "Neighborhood" Has Been Defined in the Literature.

Neighborhoods are the units within which people choose a home, the units by which municipal services are delivered, and the units in which many federal programs are carried out. Yet, we have no clear notion of what is meant by the term, "neighborhood." Nor do we know the implications of using different criteria in the establishment of neighborhood boundaries. Should we use a physical boundary? or some aspect of the neighborhood like population composition or housing type? Perhaps, many different criteria all yield the same geographic configuration or perhaps the selection of neighborhood boundaries should follow from the purpose the neighborhood analysis is to serve.

These are not new questions. Historically, scholars have had difficulty in grasping a complete definition for the term, neighborhood. This problem was aptly expressed by Terence Lee in his discussion of varying theories of urban neighborhoods.

The major difficulty for the social scientist seems to be the elusiveness of neighborhood. He cannot capture it whole in the net of a single concept. If he isolates it as a piece of territory, he often finds little or no correspondance with human behavior; if he concentrates instead on social relationships he finds that these do not synchronize with geography.

This constant confusion and the elusiveness of the concept neighborhood may imply that there is no unique physical entity that serves as a neighborhood in every circumstance.

Terence Lee in fact, concluded that each person carries within himself a unique "cognitive map"<sup>2</sup> or notion of what his neighborhood is and

...the conventional concepts of neighborhood as either a collectively acknowledged geographical area with definable boundaries, or as an interacting social group were found to be inappropriate.<sup>3</sup> (the author's emphasis)

As noted in the previous chapter, various actors must, however, subdivide the city into subunits for such decisions as: how to allocate resources, where to provide remedial programs, and how to bound administrative subunits. The psychological notion of a neighborhood which is unique to each individual is not useful to these actors. In this chapter, we shall review the literature on neighborhood definitions to see how different scholars have attempted to resolve the confusion inherent in the concept of neighborhood and how they have made the concept useful to themselves and others concerned with studying subareas of the city.

### 3.1 A TYPOLOGY OF NEIGHBORHOOD DEFINITIONS.

In order to surface the similarities and contrasts among the definitions that have been espoused in the literature, we developed a typology of neighborhood definitions. This typology has as its organizational theme, the three important elements of a neighborhood: the people living in the neighborhood, their housing, and the surrounding environment. These three elements are the basis for locating neighborhood boundaries and for analyzing differences among neighborhoods at a particular point in time as well as for analyzing differences in the same neighborhood over time. The variation among the concepts of neighborhood found in the literature is rooted primarily in the emphasis placed on each of the three key elements: people, housing, and the environment.

Those definitions that place greatest emphasis on the people living in the neighborhood may be divided into two types: 1) the cohesive neighborhood, and 2) the homogeneous neighborhood. The first, the cohesive neighborhood, is a geographically based

social group with shared values and large amounts of interaction. A homogeneous neighborhood, the second type, is a geographic district with homogeneity in the social class or race of its occupants.

Housing is the second element that may form the basis for a neighborhood definition. With housing as our focal point, neighborhoods may be identified according to 1) structural housing submarkets<sup>4</sup>, or 2) occupancy housing submarkets. In the first, we are concerned with the characteristics of the structure itself, its quality, size, and value. In the case of occupancy submarkets, we are concerned primarily with how people use their homes, especially the intensity of use and tenure. In both cases, it is assumed that a geographical area may be circumscribed according to homogeneity along either of these two lines.

We have identified two ways in which a neighborhood may be defined by emphasizing the third element, the environment. These are: 1) the planned neighborhood unit, and 2) the visual district. The first, the neighborhood unit, is primarily a term used by physical planners. It refers to a neighborhood that is built according to an explicit physical plan. The second, the visual district, is that area cut off from others because of a prominent physical feature such as a highway, railroad tracks, or a park or is differentiated from other areas because of a change in visual image such as a change from flat land to hills or from tree-lined streets to no trees.

Let us turn to the many attempts that have been made to clarify what is meant by a neighborhood. We shall review the literature according to the emphasis placed on the three critical elements: people, housing, and the environment.

## 1.2 PEOPLE

The first set of neighborhood definitions all emphasize the role that the occupants of the neighborhood play in giving their neighborhood its identity. According to these definitions, a neighborhood's identity stems from the behavior of the neighborhood's occupants, their characteristics, or their reputation. These are primarily sociological and demographic approaches to the study of neighborhoods.

### Cohesive Neighborhoods

The cohesive neighborhood is primarily a sociological concept. Suzanne Keller presented a concise definition of a cohesive neighborhood.

The sociological concept of neighborhood emphasizes the notion of shared activities, experiences, and values, common loyalties and perspectives and human networks that persist over time.<sup>5</sup>

This definition stresses the sentimental aspect of the notion, neighborhood. This is the most popularly accepted definition, yet the most elusive and most difficult to pin down as a physical entity. One may question whether there is any mechanism to find the boundaries of this psychological construct. Perhaps it has no counterpart in reality. Park, a member of the Chicago School, a group of sociologists who explored this notion in the early part of this century, claimed that only unique portions of the modern city are truly neighborhoods according to this concept.<sup>6</sup> All the rest of the city then, must be defined by some other concept.

Wirth, a student of Park, attributed "the superficiality, anonymity, and the transitory character of urban social relationships" to the loss of neighborhoods and neighborhood

ties.<sup>7</sup> These in turn he believed resulted from the increasing heterogeneity and mobility of the people living in the modern, industrial city.

R.D. McKenzie observed that, while the cohesive neighborhood generally connotes support and mutual concern among neighbors, it may have its origin in social ills.

Racial prejudice, national clannishness, and class conflict, all function as social forces to give the city neighborhood what self-consciousness or solidarity it may possess.<sup>8</sup>

Gerald Suttles also noted that the "defended neighborhood" gains an identity and cohesion to protect itself from outsiders. These types of neighborhoods are often associated with corner gangs and vigilante groups.<sup>9</sup>

More current scholars have continued the work of the Chicago human ecologists.<sup>10</sup> Surveys and studies have been conducted to determine the level of neighboring in a geographic area and to determine the number of friends a person has in his neighborhood.<sup>11</sup> These types of studies are based on the premise that neighborhoods as units of social interaction do still exist and may be located.

A romanticized view of the neighborhood as a place that fosters friendships and provides psychological support has carried over into novels. In Mario Puzo's description of an Italian family in New York, he writes:

... Santa Lucia... prepared to leave her empty flat escaping the choking summer heat, to spend her evening with neighbors in quarreling gossip, and most of all, to guard her children playing in the darkness of the city streets... the street was a meeting place and summer was a time when neighbors became friends.<sup>12</sup>

In their study of rehousing former slum residents, R. H. Morris and John Mogeey also noted that "The neighborhood is often expected to be a haven from a hostile world, a

place where the family seeks refuge and strength among its own kind."<sup>13</sup>

The socializing role of the neighborhood, intrinsic to this definition, has been shown to have varying degrees of importance according to the sex, age, and family status of each resident. Small children with limited mobility find their first friends in the neighborhood. The size of their world grows as they get older. The mother of a small child is also closely tied to a limited geographic area. She is concerned that both she and her children will become friends with people having values similar to her own. The elderly also rely on the neighborhood as the focal point of their social life and as a resource for their special needs. For the more mobile people and people working outside the neighborhood, the neighborhood as a social unit has less importance.<sup>14</sup>

According to Jane Jacobs, another important attribute of a "successful" city district or neighborhood is that people feel safe on the streets. In a cohesive neighborhood

...the sidewalk and street peace...is kept primarily by an intricate, almost unconscious, network of voluntary controls and standards among the people themselves, and enforced by the people themselves.<sup>15</sup>

Along with Jane Jacobs, R.D. McKenzie long before her underlined the importance of population stability for the maintenance of a cohesive neighborhood. Large population turnovers break down the social networks, control and commitment required for a cohesive neighborhood to exist.<sup>16</sup>

In summary, the most critical aspects of this first definition of the neighborhood are the sentiments and the behavior of the people living in the neighborhood. Neighborhoods may be distinguished from each other and from "nonneighborhoods" by the level of cohesion and social interaction among residents..

### Homogeneous Neighborhoods

The second people-oriented definition of the neighborhood stresses homogeneity in certain characteristics of the people living within a geographic district. There is none of the sentimentality or cohesiveness characteristic of the first view of the neighborhood. Homogeneity may lead to neighboring but social interaction is not crucial to a neighborhood according to this second perspective.

This second view, was advocated by some in reaction to the more limited definitions used by the Chicago School. The most important exponents of this view were Wendell Bell and Eshref Shevky. The basis of their subareas which they called "social areas" was an aggregation of census tracts containing people who are similar in economic status, urbanism and ethnicity.<sup>17</sup> Bell and Shevky

...view a social area as containing people with similar positions in the larger society. The social area, however, is not bound by the geographical frame of reference as is the natural area, nor by implications concerning the degree of interaction between persons in the local community as is the subculture. [They] do claim, however, that the social area generally contains persons having the same level of living, the same way of life, and the same ethnic background, and [they] hypothesize that persons living in a particular type of social area would systematically differ with respect to characteristic attitudes and behavior from persons living in another type of social area.<sup>18</sup> (emphasis my own)

Unlike cohesive neighborhoods, the entire city may be divided into social areas.

We differ from their comment that social areas are not "bounded by a geographical frame of reference." The selection of census tracts as the unit of analysis gives the definition a geographical basis. Social areas do not, however, have to be geographically contiguous in that social areas representing the same type of people may be scattered

throughout the city.

Social area analysis has been criticized for lacking a theoretical framework and for assuming too great a homogeneity within census tracts in the development of the indices of economic status, urbanism, and ethnicity.<sup>19</sup> The originators of this concept cited the principal strengths in looking at the subunits of a city according to this framework as:

1) It is of descriptive value for sociologists, city planners, and others trying to get a clear picture of the neighborhood pattern of a city; 2) It allows for comparative studies of different cities at one point in time; 3) It allows for comparative studies of the same city or subarea over time; 4) It may be used as a framework for other research (e.g. choosing a survey sample).<sup>20</sup>

Absolute homogeneity rarely exists in reality. Many areas gain the reputation of being homogeneous according to a particular characteristic of the population. In this case, it is more the appearance of homogeneity rather than an absolute standard that sets the definition for a homogeneous neighborhood. In line with this view, Gerald Suttles noted that

residential groups gain their identity by their most apparent differences from one another...Neither area need be homogeneous in the characteristics or background of its residents, and studies which have emphasized social homogeneity as the basis for neighborhood solidarity have seldom shown much extreme homogeneity to exist...Residential identities, then, are imbedded in a contrastive structure in which each neighborhood is known primarily as a counterpart to some of the others, and relative differences are probably more important than any single and widely shared social characteristics...Community identification, then, can be conceived of as a broad dialogue that gravitates toward collective representations which have credence to both residents and non-residents alike.<sup>21</sup>



This is an attack upon the assumption of homogeneity in Social Area Analysis. Instead, the reputation of an area is built upon people's perceptions of it and their desire to be associated with that geographic area or to differentiate themselves from it.

Herbert Gans documented the phenomenon of classifying the population of an entire area according to a subjective stereotype of the area and its residents.

...the concept of the West End as a single neighborhood was foreign to the West Enders themselves. Although the area had long been known as the West End, the residents themselves divided it up into many subareas, depending in part on the ethnic group which predominated, and in part on the extent to which the tenants in one set of streets had reason or opportunity to use another... Until the coming of redevelopment, only outsiders were likely to think of the West End as a single neighborhood. After the redevelopment was announced, the residents were drawn together by the common danger, but, even so, the West End never became a cohesive neighborhood.<sup>22</sup>

All the residents of Boston's West End were here lumped together as living in a "slum" neighborhood.

The stereotyping phenomenon may also occur in another way. An area which has a special history or played a special role in the city at one time may retain its reputation although the type of people who originally lived there and participated in the development of the reputation are no longer numerous in the neighborhood. Many large cities' Chinatowns or Little Italies are the neighborhoods that were once largely populated by Chinese or Italian immigrants. Once these people begin to move out or later generations begin to adopt the American culture, the areas generally maintain their identifying title and image of homogeneity although populated by a different type of people.

Suburbs that are annexed to cities also often maintain a special, although not rele-

vant, image of homogeneity as well as maintaining their original name long after annexation, yielding neighborhoods with a historical identity. These historical neighborhoods may no longer qualify as a neighborhood under any of the main definitions.

This second definition of neighborhood revolves around the characteristics of the people living in the area, in particular, their economic status, their age or their ethnicity. These are the characteristics which in turn largely determine people's needs and values.

### 1.3 HOUSING

When housing is used as the basis for the definition of a neighborhood, the area described is often called a housing submarket. This is the type of definition most often used by the economist. Although the concept of a housing submarket is operationalized by realtors, lenders, and builders, it has received very little attention in the housing literature.

The formal definition of a housing submarket is

a physical area within which all dwelling units are substitutable; they are all in competition for a purchaser through a price mechanism.<sup>23</sup>

As we can see, there are two interrelated themes in this definition. The first one deals with the housing structures themselves and the second deals with the people who choose to live in the structure. We have divided our analysis of the literature on housing submarkets into this two-part scheme. We shall first discuss housing submarkets according to structural characteristics and second look at occupancy characteristics.

### Structural Housing Submarkets

The characteristics of the structure itself that are most important in defining a neighborhood are its value or rent level, its type and size, and its quality. In the above definition, it is primarily the price or rent level that is used to distinguish one housing submarket from another. These are in part a function of the other two parameters, size and quality.

The concept of the housing submarket was developed in greatest detail by William Grigsby. In Housing Markets and Public Policy, he developed a notion of submarkets to serve as a framework within which to analyze how the housing market functioned.<sup>24</sup>

Peterson, Solomon, et.al, in their discussion of how property tax policies differentially affect different neighborhoods, also chose housing submarkets as their framework. Their choice was based on the fact that this is an "operational" definition of a neighborhood.

All characteristics which determine the market value of a property are reflected in its price, e.g., age, and type of structure, proximity to job location, and quality of neighborhood services...there is a strong relationship between relative market prices and certain socio-economic and land use characteristics.<sup>25</sup>

Here, the price of the structure was used as the most critical element of housing. The other structural characteristics as well as many occupancy characteristics were believed to be reflected in the price of the unit.

Structural homogeneity also gives a neighborhood a visual unity. Often, many houses of similar type and size are built at the same time by a single developer. The most obvious example of this is the suburban tract development. In this instance, it is

the similarity in structural type that gives a neighborhood its identity.

The final aspect of structural homogeneity, or a structural housing submarket is the quality of the structure. This has two components. The first is the quality of the construction of the structure. This generally depends on the income class for whom the dwelling unit was intended. The second component of quality is the level of maintenance. The level of maintenance is controlled by the owner of the structure and is determined largely on the basis of his assessment of the viability of his housing investment. The concept of maintenance will be developed in great detail when we discuss theories of neighborhood change in Chapter 4. Quality again gives a geographic area visual unity. Quality and maintenance level are also reflected in the price of the unit as indicated by Peterson, Solomon, et.al.

#### Occupancy Housing Submarkets

The link between people and their housing has received much more attention in the literature dealing with neighborhoods than have housing characteristics per se. William Girsby noted

...the linkages among submarkets are, in reality, families. The link distance between two submarkets is determined by the proportion of families in the first submarket who would react to a given change in the second submarket or vice versa.<sup>26</sup>

In a similar manner to housing units which are grouped according to price or rent levels, the families to be associated with each submarket are classified according to age and sex of head, income, race, family size, and the employment location of the head of the

household. Families of each type according to these variables will associate themselves with the specific submarket that meets their needs, preferences, and capabilities.<sup>27</sup>

Housing value then determines who the occupants of structures can be. According to R. D. McKenzie, neighborhoods may be ranked according to housing value and according to who can afford to live in the houses.<sup>28</sup>

Richard Coleman also studied the stratification of population according to housing values. He found that

Kansas Citians looked upon address not only as evidence of financial status but also as an important sign of a family's status goals... Kansas Citians felt that neighborhood choice indicated whether a family cared enough about status to spend more money to buy a house in a desirable neighborhood than would be required to purchase an equivalent house in a less desirable neighborhood.<sup>29</sup>

Besides being identifiable as socio-economically stratified, occupancy housing submarkets are also recognizable on the basis of population density and tenure. In the first instance, certain neighborhoods may be distinguished from others by the intensity of the use of the dwelling units. For example, an area may be noted for housing families in units that are too small for them. This is commonly labeled "overcrowding." Overcrowding is an important indicator of housing deprivation.<sup>30</sup> In the instance of tenure, neighborhoods may be identified as rooming-house districts, rental districts, or owner-occupied districts. Each of the three carries a commonly accepted value judgement. Rooming house and rental areas are considered to be more transient and are believed to house people with less stake and interest in the future of their neighborhood than areas that contain predominantly owner-occupied housing.

## 1.4 THE ENVIRONMENT

The third element according to which one may define a neighborhood is the environment. By environment, we primarily mean the visual and physical aspects of a residential area. The physical environment, traditionally the domain of the city planner, is the basis of two different ways of defining a neighborhood. These are the planned neighborhood unit and the visual district.

### Planned Neighborhood Units

This first environmental neighborhood definition is perhaps the most operationally defined of all the definitions of a neighborhood that we shall study. A neighborhood unit is a geographic area developed as a "neighborhood" in terms of the common use of neighborhood facilities by the residents. The original neighborhood unit plans stressed efficiency of design and convenience. Clarence Perry developed one of the earliest formulas for a city neighborhood,

...such that when embodied in an actual development all its residents will be taken care of as respects the following points: They will be within convenient access to an elementary school, adequate common play spaces, and retail shopping districts. Furthermore, their district will enjoy a distinctive character, because of qualities pertaining visibly to its terrain and structure...<sup>31</sup>

Perry's view of how a neighborhood should be planned had its origin in housing theory. He felt that housing had a longer life span than its surrounding environment and as the environment began to decline in desirability, the housing dropped in value much more quickly than it should. He concluded that energy must be put into planning for a better

neighborhood environment.<sup>32</sup> More recently, planned neighborhoods have been a principal feature in American new towns. This is vividly the case in Columbia, Maryland and Reston, Virginia.

In addition to their concerns for providing the advantages of a well planned physical environment, the proponents of the neighborhood unit wanted to build provisions for social interaction and harmony into their plans. In a similar manner to the members of the Chicago School, this group of scholars were concerned about the social disruption resulting from industrialization and the growth of the city. Rather than searching for neighborhoods within the city, as did members of the Chicago School they chose to act on their concerns and plan new neighborhoods which would not exhibit the same physical and social evils that were destroying the urban neighborhoods. Lawrence Susskind recently noted, however, that "the neighborhood unit is not the locus of informal relations it was supposed to be."<sup>33</sup> This may in part be attributed to the large size of the neighborhood unit and the large amounts of commuting required by many of the residents of planned neighborhoods.<sup>34</sup>

Many of the critics of the neighborhood unit attacked its advocates on their weak development of the theory's social parameters.<sup>35</sup> The most outspoken critic was Reginald Isaacs who viewed this as a scheme to insure racial and class segregation.<sup>36</sup> The plans for neighborhood units were generally geared to homogeneity of income. This was based on the desire to increase social interaction and to maintain stability.

The neighborhood unit was also criticized because it represents "nostalgia for the rural village." Some scholars doubt the underlying belief of the advocates of the neighbor-

hood unit, that a static, homogeneous, and socially cohesive unit characteristic of more rural areas could even be reproduced in the modern heterogeneous urban area. Reginald Isaacs claimed that this was

...a fruitless attempt to make static residential areas in the midst of mobile and dynamic cities; and worse-as an instrument of racial, ethnic, social, and economic segregation.<sup>38</sup>

Suzanne Keller also addressed this issue.

Only where local areas are also isolated geographically or culturally can the neighborhood unit assume the social significance originally anticipated...They are increasingly drawn in and thus defined, by the shape and structure of the larger urban framework to which they belong. Their erstwhile autonomy is perhaps still visible in the more deprived areas of cities, areas cut off from the main currents of economic opportunity and cultural variety.<sup>39</sup>

The most critical element in the neighborhood unit as a definition of neighborhood is the physical environment. This may be called a "bricks and mortar" approach to the concept of neighborhood. It is assumed that an adequate physical environment will prevent many of the problems of contemporary urban life. Secondary importance is placed on the social environment and on the people who live in the neighborhood unit. The physical plan is expected to instill feelings of cohesiveness and neighborliness in those living in the neighborhood unit. Finally, the housing in the neighborhood unit is generally geared to a homogeneous market. It is this element of the physical environment which to a large extent dictates who the residents will be and as a result is expected to spur feelings of closeness and intimacy.



### Visual Neighborhoods.

The final neighborhood definition is that based on an observer's visual impression of how the city breaks down into subareas or neighborhoods. The most important environmental elements which contribute to the spatial differentiation of subareas are what Kevin Lynch labelled as: paths, edges, districts, nodes, and landmarks.<sup>40</sup> These may serve as visual boundaries between two neighborhoods or may serve as ways to distinguish between two different neighborhoods. For example, a park both visually and physically divides areas from each other. A sharp break from high rise construction to single family homes is another visual indication of a change from one neighborhood to another. Zoning laws often reinforce visual continuity within an area and help to differentiate neighborhoods.

William Sims and Richard Warthen recently employed Kevin Lynch's concepts to locate neighborhoods to serve as planning districts in Columbus, Ohio. They operationalized paths, edges, and districts and then selected a set of elements for analysis. These elements were: topography, streams and water bodies, vegetation, railroads, highways and freeways, major streets, undeveloped land, and land use.<sup>41</sup> These authors were most concerned with the "process of neighborhood concept formation" in their search for the neighborhoods of Columbus.<sup>42</sup>

The neighborhood defined as a visual district is dependent entirely on people's perceptions of their environment. We are not here concerned with people's behavior in their environment, just how they perceive it and divide it into districts on the basis of their visual impressions.

## 1.5 SUMMARY

We have just looked at six different sets of neighborhood definitions, each illustrating a different perspective. The first two, the cohesive neighborhood and the homogeneous neighborhood, both primarily revolved around the people living in the neighborhood. The third and fourth definitions were based on the structure and type of occupancy of the housing in a geographic area. The last two definitions placed greatest emphasis on the physical environment. These two types of neighborhood definitions under this category were the neighborhood planning unit, and the visual district.

Each set of definitions placed prime emphasis on one of our three neighborhood elements, people, housing, or the environment. However, in almost every case, the two less important elements were still called upon to play a secondary role.

So far, we have set up a framework within which one may categorize and contrast neighborhood definitions and we have looked at a diverse group of definitions that have appeared in the literature of many different disciplines. The task of our next chapter is to whittle this large amount of information down into operational form. We must extract the key criteria from each definition so that we may locate neighborhoods in keeping with each definition and then determine whether they each circumscribe similar or divergent spatial units.

## Footnotes: Chapter 1

1. Terence Lee, "Urban Neighborhoods as a Socio-Spatial Schema," Environmental Psychology: Man and His Physical Setting, eds. Harold M. Proshansky, William H. Ittelson, Leanne G. Rivlin (New York: Holt, Rinehart, and Winston, Inc., 1970), p. 349.
2. For a discussion of cognitive maps with respect to neighborhoods see: Gerald D. Suttles, The Social Construction of Communities (Chicago: The University of Chicago Press, 1972), Chapter 2.
3. Lee, p. 254.
4. We shall not use submarkets in the strict economic sense but rather as a term to describe neighborhoods in which housing is the defining element.
5. Suzanne Keller, The Urban Neighborhood: A Sociological Perspective (New York: Random House, 1968), p. 91.
6. Other members of the Chicago School of Human Ecology are R.D. McKenzie and Ernest W. Burgess.
7. Leonard Reissman, The Urban Process: Cities in Industrial Society (New York: The Free Press of Glencoe, 1946), p. 140.
8. R.D. McKenzie, "The Neighborhood: A Study of Local Life in the City of Columbus, Ohio," The American Journal of Sociology (November, 1921), p. 64. Reprinted in The Rise of Urban America (New York: Arno Press and New York Times, 1970).
9. Suttles, Chapter 2.
10. For a discussion of the work of the human ecologists see Reissman.
11. See for example: Sylvia Fleiss Fava, "Contrasts in Neighboring: New York and a Suburban Community," The Suburban Community, ed. William M. Dobriner (New York: Putnam, 1958), pp. 123-31. Theodore Caplow, Sheldon Stryker and Samuel E. Wallace, The Urban Ambience (Totowa, New Jersey: Bedminster, 1964), Elizabeth Bott, Family and Social Network (London: Tavistock, 1957), p. 67.

12. Mario Puzo, The Fortunate Pilgrim, (New York: Lunar Books, 1964), p. 10.
13. R.H. Morris and John Moge, The Sociology of Housing: Studies at Berinsfield (London: Routledge and Kegan Paul, 1965), p. 123.
14. Peter H. Mann, "The Neighborhood," Neighborhood, City, and Metropolis: An Integrated Reader in Urban Sociology, eds. Robert Gutman, David Popenoe, (New York: Random House, 1970) pp. 578-9.
15. Jane Jacobs, The Death and Life of Great American Cities (New York: Vintage Books, 1961), pp. 31-2.
16. McKenzie, September, 1921, p. 150.
17. Wendell Bell and Eshref Shevky, Social Area Analysis (Stanford, Cal.: Stanford University Press, 1955).

The following is the computational procedure for the indices:

1. Social Rank is composed of:
  - a. Occupation Ratio = total number of craftsmen, operatives, laborers per 1,000 employed persons.
  - b. Education Ratio = number of persons who have completed no more than grade school per 1,000 persons over 25 years old.

Standardize both scores and compute the average
2. Urbanization-Familism Ratio is composed of:
  - a. Fertility ratio = number of children under 5 per 1,000 females age 15 through 44.
  - b. Women in labor force = number of women in the labor force per 1,000 females over 14 years old.
  - c. Single-family detached dwelling units

Standardize and take average.
3. Index of Segregation.
  - a. Add the number of "Negro," "Other Races" and "foreign born white"
  - b. Divide by total population and multiply by 100.

Social Rank and Urbanization are divided into 4 groups on the basis of quartiles, these are labelled 1 through 4 and A through D respectively. Segregated tracts have a higher segregation index than the city as a whole. There are then 32 possible groupings of census tracts: 1A, 1B, 1C, 1D, 2A, ..., 4D, 1As, 1Bs, .....4Ds.

see page 54 through 58.

18. Ibid., p. 20.
19. For a critique of Social Area Analysis see: Amos H. Hawky and Otis Dudley Duncan, "Social Area Analysis: A Critical Appraisal," Land Economics, XXXIII (November, 1957), pp. 337-45.
20. Wendell Bell, "Social Areas: Typology of Urban Neighborhoods," Community Structure and Analysis, ed. Marvin B. Sussman (New York: Thomas Y. Crowell Co., 1959) pp. 75-88.
21. Suttles, pp. 50-2.
22. Herbert Gans, The Urban Villagers, (New York: The Free Press, 1962), p. 11.
23. Linton C. Freeman and Morris H. Sunshine, Patterns of Residential Segregation (Cambridge, Mass.: Schenkman Publishing Co., 1970), p. 8.
24. William Grigsby, Housing Markets and Public Policy, (Philadelphia: University of Pennsylvania Press, 1963), p. 21.
25. George E. Peterson, Arthur P. Solomon, Hadi Madjd, William C. Apgar, Jr. Property Taxes, Housing and the Cities (Lexington, Mass.: Lexington Books, D.C. Heath and Co., 1973), p. 125.
26. Grigsby, p. 48.
27. Ibid.
28. McKenzie, September, 1921, p. 152.
29. Richard P. Coleman and Bernice L. Neugarten, Social Status and the City (San Francisco: Jossey - Bass, Inc., 1971), p. 89.
30. For a discussion of housing deprivation and overcrowding see: David Birch, et. al., America's Housing Needs: 1970 to 1980 (Cambridge, Mass: Joint Center for Urban Studies of the Massachusetts Institute of Technology and Harvard University, December, 1973), Chapter 4.
31. Clarence Perry, Housing for the Machine Age (New York: Russell Sage Foundation, 1939), p. 50.
32. Ibid., p. 15.
33. Lawrence Susskind, "Planning for New Towns: The Gap Between Theory and Practice," Sociological Inquiry, XLIII (No. 3-4, 1973), p. 299.

34. Ibid.

35. See for example: Judith Tennenbaum, "The Neighborhood: A Socio-Psychological Analysis," Land Economics, XXIV (November, 1948).

36. Reginald Issacs, "The Neighborhood Theory," Journal of the American Institute of Planners XIV, No. 2 (Spring, 1948), pp. 15-23.

37. Ibid, p. 18.

38. Ibid.

39. Keller, p. 146.

40. Kevin Lynch, The Image of the City (Cambridge: The M.I.T. Press, 1960. Chapter 1.

41. William Sims and Richard Warthen, Neighborhoods: Columbus Neighborhood Definition Study (Columbus, Ohio: Department of Development, 1973), pp. 6-7.

## Chapter 2: Operationalizing the Six Neighborhood Definitions

As we saw in Chapter 1, there are many different interpretations of what constitutes a neighborhood. We have studied six different sets of neighborhood definitions, each emphasizing a different aspect of the neighborhood. For these definitions to be useful to those actors who must rely on a notion of neighborhood, they must be made operational. Unfortunately, very little of the neighborhood literature includes a set of criteria for actually identifying neighborhood boundaries. In this chapter, we shall return to the framework established in the first chapter and extract from each definition those criteria according to which one may identify a neighborhood or according to which one may differentiate one neighborhood from another.

In this chapter, we shall be as rigorous as possible in setting out the characteristics of each type of neighborhood, the data required for locating each type of neighborhood and the methodology to be used in carrying out the investigation.

### 2.1 PEOPLE

Our first two definitions both revolve around the role people play in giving their neighborhood an identity. The behavior and characteristics of the occupants are most critical in establishing the unique identity of a neighborhood and in locating the boundaries of a neighborhood under these first two concepts of neighborhood.

#### Cohesive Neighborhoods

The cohesive neighborhood has the largest number of interpretations and is also the

most elusive of our neighborhood definitions. In essence, it is people's behavior, values, and perceptions of each other that form the basis for this definition.

We shall focus on three different methods of determining the bounds of social interaction, an activity intrinsic to a cohesive neighborhood. The first was suggested by Ruth Glass, the second by S. Riemer and Frank L. Sweetzer and the third by Herbert Gans. According to the first, a set of indices is required which "reflect the concentration of primary social activities and social contacts within the area of a distinct territorial group."<sup>1</sup> Ms. Glass's method places an emphasis on the territorial component of the definition. She suggested overlaying the catchment area maps for such relevant neighborhood institutions as schools and clubs "to establish the existence and degree of concentration or dispersal of the essential and organized social activities."<sup>2</sup> To further establish the concentration of social contacts within a geographic area, she suggested charting the use patterns of local institutions to determine the geographic extent of use.

The second method, that used by Riemer and Sweetzer, focuses on less formal social relationships and interactions. They undertook interviews which probed for the geographic distribution of the respondents' acquaintances, friends and neighboring activities. The results of their findings were what Riemer labeled "contact clusters" and what Sweetzer called "personal neighborhoods."<sup>3</sup>

Although not his primary intent, in his study of Boston's West End, Herbert Gans learned to identify the bounds of different cohesive neighborhoods within the larger boundaries of the West End. He relied upon a sociological and anthropological method of investigation known as participant observation. In his case, Gans lived in the West End



for a long period of time, and met many residents. During the course of his investigation, he became familiar with people's activities and social networks.<sup>4</sup>

The following is a summary of the alternative methods for identifying cohesive neighborhoods.

<u>Identifying Characteristics</u>	<u>Required Data</u>	<u>Source of Data</u>
1. Concentration of social activities	1. Use patterns of local institutions.	1. a. Catchment area map b. Survey of use patterns c. Interview d. Participant observation
2. Social networks	2. a. Neighboring patterns b. Areal distribution of friends and acquaintances	2. a. Interviews Participant observation b. Interviews Participant observation

Although these are all potential methods for locating a cohesive neighborhood, they may all define neighborhoods of different sizes. The catchment areas for school districts and clubs are larger than a network of social interaction. In addition, if one assumes that an elementary school district or a church parish determines the bounds of a cohesive neighborhood, then every part of the city falls within the bounds of a cohesive neighborhood. Each of these districts, however, may not contain people who interact with each other regularly or who unanimously share common institutions. The boundaries found from the above proxy indicators of cohesive neighborhoods, may, rather point to potential nuclei of social interaction, some of which are cohesive neighborhoods and some of

which are not.

### Homogeneous Neighborhood

Homogeneity of population may be defined in terms of such variables as socio-economic status, ethnicity or age distribution. The boundaries of such a neighborhood depend on the parameter or set of parameters used as the basis for the analysis. Grossly, the boundary is where a group, based on the selected criteria ends. It is, however, rare that an area is truly homogeneous or that there are very sharp breaks between areas. More likely, an area is viewed as homogeneous by the outside world.

Bell and Shevky developed an operational definition for homogeneous neighborhoods based on commonly agreed upon geographic units.<sup>5</sup> Their social area is an aggregation of census tracts with homogeneity in three indices, social class, familism, and ethnicity. The boundary lines used are the boundary lines of the aggregation of homogenous census tracts. The size of a social area depends on the size of the tracts and the number of tracts in the aggregation. Individuals living in a particular social area would be expected to exhibit similar types of behavior.

Bell and Shevky developed their indices based on the 1940 Census. The demographic trends that were dominant in the 1940's no longer have the same significance in the 1970's. For example, twelfth grade is now a better break-off point than eighth grade in establishing the education index. The male blue-collar population is more relevant than the entire blue-collar population in the occupation ratio because lower socio-economic women are often white collar clerical workers.<sup>6</sup> The urbanism-familism index composed of a fertility ratio,

percent women in the work force, and percent single family homes, had greater validity during the rapid suburbanization of the 1940's and 1950's than it currently has. Finally, the inclusion of European foreign born in the ethnicity index is also out of date. Today, depending on the city, an index of Spanish-speaking or Black residents would be more useful. More recently socio-economic indices based on the median income, educational attainment and occupational status of a tract relative to the city or standard metropolitan statistical area (SMSA) have been developed to more clearly reflect the current notion of social class.

Indices built on census tracts are not necessarily valid. Census tracts cannot be assumed to be homogeneous. As Hawley and Duncan pointed out in their critique of Social Area Analysis, a social area with 25 percent negro population would be considered a segregated social area yet it is not homogeneous. The white and non-white populations may differ greatly among other variables.<sup>7</sup> They added

Other data could readily be adduced for the argument that social areas at best, comprise populations that are homogeneous only in a relative sense and to only a moderate degree, even though patterns of areal differentiation, may stand out clearly.<sup>8</sup>

Census data was first published at the tract level for Boston in 1950. When tracts are originally established one important guideline to be followed is:

Census tracts should contain, as far as practicable people of similar racial or national characteristics of similar economic status and with similar housing.<sup>9</sup>

However, the overriding rule is that tracts should be comparable over time and that the boundaries should remain the same, even if the initial homogeneity has vanished.<sup>10</sup> It is

therefore no longer safe to assume that the 1970 census tracts are homogeneous. In addition, the above quotation is the most explicit statement in the Census Tract Manual as to how to determine homogeneous areas. Bringing the exact level of initial homogeneity into question.

Locating finer-grained homogeneous neighborhoods is very difficult with existing demographic data. A working definition of homogeneity has not been carefully pursued in the literature. Kenneth Suchan undertook a study of heterogeneity in residential neighborhoods. In his study, if a census tract resembles the distribution of the metropolitan area according to a selected set of demographic variables it was considered heterogeneous. He found very few heterogeneous tracts according to these guidelines.<sup>11</sup>

Drawing from Suchan's study and from Bell and Skevky's definition of a segregated social area,<sup>12</sup> we may define a homogeneous census tract as one exceeding the city's distribution on a category of a particular variable. This measure provides data on a neighborhood that may be perceived as homogeneous or one that is homogeneous on a relative scheme. The formula to be followed in this analysis is:

Tract X is homogeneous on variable C if:  

$$\%C_x \geq \%C_{\text{Boston}} + 10\%$$

Absolute homogeneity or complete uniformity on any characteristic is quite rare in most urban areas. For this reason, we shall arbitrarily select 51 percent or a majority of the population as the cut off for an absolutely homogeneous neighborhood.

The following chart is a summary of the various techniques for locating a homogeneous neighborhood.

<u>Identifying Characteristics</u>	<u>Required Data</u>	<u>Source of Data</u>
<b>1. Social Area</b> a. Socio-Economic Index b. Familism-Urbanism Index c. Segregation Index d. Other demographic characteristics	<b>1. Tract Census Distributions</b> a. Education, Occupation b. Children under 5, Women over 14, Women in the labor force, Single family homes c. Negro, Foreign born d. Distribution of demographic data on city and census tract level	<b>1. Published census data at city, tract and block levels.</b>

The size of the enclave whose existence constitutes a homogeneous neighborhood may vary widely. The level of aggregation of the data being used to locate a homogeneous neighborhood, however, dictates a minimum size for the neighborhood that can be located. For example, the smallest homogeneous neighborhood that can be located using census data is the tract. The block level census contains very little information on population characteristics. This is to maintain confidentiality. Only the number of non-white residents is given in this data base. As noted above, a tract need not be homogeneous. A tract may in reality contain several smaller homogeneous neighborhoods, but this is not discernable from the available data. A homogeneous neighborhood may alternatively straddle tract boundaries, and thus not be identifiable. Finally, a homogeneous neighborhood need not necessarily exist or be too small to serve the needs of those analyzing neighborhoods.

The indices based on aggregations of tracts carry the assumption that the entire city may be sliced into relatively homogeneous subareas. Other criteria for homogeneity limit the analyst to distinct noncontiguous subareas that contain a homogeneous population.

These subareas need not cover the entire city, but may only constitute scattered clusters of similar people. Finally the analyst must establish a minimum size for a homogeneous neighborhood, in order to avoid locating meaningless neighborhoods containing just one or two similar people. If he selects an area that is too large, he will not find homogeneity. The question of the correct minimum size for a homogeneous neighborhood necessary for this to be a meaningful concept requires further investigation.

## 2.2 HOUSING

The next two definitions have housing as their identifying element. Housing may be studied according to two broad categories, the characteristics of the housing and the way in which the housing is used.

### Structural Housing Submarkets

As noted in the first chapter, the characteristics most important in defining a structurally homogeneous submarket are value or rent level, structure size and type and structure quality. The boundaries that cut one submarket off from another are not clear breaks, but instead as William Grigsby pointed out, submarkets are on a continuum with one submarket flowing into the next.<sup>13</sup>

The most commonly used measure for locating housing submarkets is the price or rent level. Three different data bases may be used to locate this type of neighborhood. The first is the tract and block level census, the second is published data on sales of structures, and the third is the professional opinion of realtors, assessors, and lenders. We shall now

briefly discuss each of these three sources of property value data in turn.

As in the case of the homogeneous neighborhood, a reliance on census tracts limits the analysis to a subarea defined in the past and according to very inexplicit guidelines. Each census tract contains a gradient of prices. Using the median value or median rent may blur the possible existence of several submarkets contained within a tract or submarkets which straddle more than one tract. Although the sample size is small, value and rent data are available at the block level allowing for more fine-grained subdivisions. The second problem in using census data is that value figures are based on the value the owner places on his structure rather than that dictated by the market.

Richard Coleman developed a seven level categorization of housing based on how residents perceive the status of housing. The purpose of his index was "to look at the total range of housing, from worst to best through the eyes of the Boston public, so that definitions of housing levels can be drawn which reflect the lay citizen's view of the matter."<sup>4</sup> Coleman then operationalized these seven levels of housing status by defining each in terms of a rent and value range that may in turn be found in the decennial census. The data required to apply this typology is available at both the block level and the tract level. Appendix A contains a detailed description of Coleman's categories of housing.

Data on sales in Massachusetts are available from several sources: the Registry of the Deeds and two published sources, Banker and Tradesman and Appraiser's Weekly. Going through any of these sources is a very tedious task. It is also very difficult to determine the size of the structure that was sold, thus limiting the comparability among

the recorded sales. Because houses do not turn over quickly, the sample size in a given year may be unrepresentative of the housing stock in the submarket. The primary worth of this source of data is in the flexibility it allows the analyst. It provides the market value and the exact address of the structure that was sold, allowing the analyst to locate submarket boundaries according to the value of comparable types of structures. Determining comparability of structures requires a field investigation. The analyst is not, however, restricted to predefined subareas as in the case of census tracts.

Real estate professionals have considerable knowledge of the housing submarkets within which they conduct business and can provide information on the bounds of submarkets. Generally the evaluations of realtors are not based on a published data series but on first-hand knowledge and intuition.

The other three structural components, unit size, structure type and quality, may also be used to define structural housing submarkets. These variables are generally highly correlated with value and rent level because unit size, structure type and quality are three elements that enter into the market value of a housing unit or the rent level of a rental unit. These components may also serve as clues for visually picking out housing submarkets which may later be confirmed with value statistics or vice versa.

In each case, the question of homogeneity must be tackled. We suggest the same criteria as used for homogeneous neighborhoods. Alternately, one may turn to aggregations of homogeneous census blocks, based on a more strict measure of homogeneity, such as eighty percent. There would be less variability at this scale than at the tract scale.

The information required for locating a structural housing submarket may be summarized



as follows:

<u>Identifying Characteristics</u>	<u>Required Data</u>	<u>Source of Data</u>
1. Value or Rent Level	1. Value or rent level Purchase price	1. Census-block and tract level Registry of Deeds, Banker and Tradesman, <u>Appraisor's Weekly</u> Real Estate professionals
2. Type of Structure	2. Number of Units	2. Census tract level data
3. Size of Unit	3. Number of rooms	3. Census tract level data
4. Quality of Structure	4. a. Structural defects b. Adequacy of systems	4. a. Wind shield survey List of filed housing complaints and code violations b. Census tract data-plumbing, heating

Once again, a distinction must be made between determining the actual size of housing submarkets and the size dictated by existing data. The size of the housing submarket may depend on such factors as zoning, the way in which an area was developed, and demographic and economic trends. The exact size of a housing submarket may not necessarily be determined from tract level census. When using block level data, the size of the neighborhood depends on the number of contiguous homogeneous blocks. The scarcity of data on comparable sales, and the subjectivity and variation in people's perceptions of real estate values and trends also add to the ambiguity involved in accurately determining the boundaries of a structural housing submarket.

### Occupancy Housing Submarkets

The defining characteristics of an occupancy housing submarket or a neighborhood classified according to the way in which its housing is used are: tenure and intensity of use. The primary source of data for both variables is the tract level census of housing characteristics. The most clear-cut neighborhood boundaries are those identified with submarkets divided along tenure lines. The other variable, overcrowding, generally does not exist in sufficiently large aggregations to clearly define a submarket. However, when taken in combination with other population characteristics, it does provide very important information for neighborhood planning.

Some districts in a city contain primarily rental properties and others primarily owner-occupied structures. This may be a result of such factors as market demand, availability and cost of land, and zoning ordinances. In many urban areas, there are also additional forms of tenure: rooming houses, dormitories and nursing homes. Rental versus owner-occupied districts may be identified using tract and block level census data. The other forms of tenure are classified in the census as "group quarters." Along with providing housing market information, knowledge of the tenure of the housing in an area gives some information about the occupants and their needs. Renters are most often single person households, couples without children, elderly people, and low-income people. The residents of rental areas are often considered to be transient and less committed to safeguarding the future of the neighborhood.

A unit is overcrowded when there is more than one person per room. Overcrowding is generally considered a health hazard. This is one of the factors that is taken into account

in selecting Urban Renewal areas. An area may be overcrowded because it contains very small units. These may have originally been larger units that have been subdivided. Overcrowded areas may also contain large families who do not have adequate income for sufficiently large units. Overcrowding information is again provided in the tract level census. The nature of the overcrowding may be documented by investigating the size of units and the size of families in the area.

Neighborhood boundaries based on occupancy characteristics are again dependent on a notion of homogeneity. In the case of tenure, 51 percent rental (or owner-occupied) is the cut-off point to be applied. In Boston, any larger proportion would result in nearly all rental submarkets, thus ignoring the few nuclei of owner occupancy remaining. In addition, often one structure will contain three or more rental units. Owner occupied structures contain at most three other units. Therefore, 51 percent owner occupied units would generally refer to a larger number of owner occupied structures than rental structures. In the case of overcrowding, a proportion larger than that for the city as a whole would provide information that would help categorize a submarket and its special needs. Rarely will a whole census tract be overcrowded.

The occupancy housing submarket may be located in the following ways:

<u>Identifying Characteristics</u>	<u>Required Data</u>	<u>Source of Data</u>
1. Uniformity of Tenure	1. Aggregations of rental, owner-occupied, and rooming house properties	1. Tract and block level census data Zoning map Windshield survey
2. Intensity of Use	2. a. Number of people per room 1. Number of rooms 2. Size of household b. Number of subdivisions c. Density - number of units per acre.	3. a. 1. Tract level census data 2. Interviews b. Building permits c. Sanborne maps

Once again the size of the observable submarket is strongly tied to census tract boundaries and analysis must be carried out within these limitations. Field work and observation would be useful to gain a more clear understanding of the finer-grained aggregations of similarly occupied housing. Construction permits provide data on areas that have undergone large amounts of conversion and thus provide a clue to the exact location of overcrowded housing.

### 2.3 ENVIRONMENT

The final set of neighborhoods are those that are defined according to features of the physical environment. Neighborhood boundaries based on environmental factors are more fixed over time than those based on people and housing which themselves change with time thus causing a fluctuation in boundaries. The neighborhood definitions based

on the environment are then the least difficult to operationalize. They also reflect the exact size of the neighborhood more clearly because the identifying data does not come from the census but from plans, and direct observations.

### Planned Neighborhood Units

Boundaries are a critical element in a planned neighborhood because it is the boundaries that determine the size and shape of the area in which the various components of the neighborhood must be planned. In Perry's early plans, he stressed the importance of the residents' being a convenient distance from such facilities as schools, play space and shopping. This dictates a minimum and a maximum size for a neighborhood. There must be enough people to support an elementary school or shopping district. Perry also wanted to limit vehicular traffic and to encourage people to walk to their required destinations, thus putting a limit on the outer boundary of the neighborhood unit.

Unlike the previous definitions, the theory behind a planned neighborhood dictates the operational definition. Both the size and the boundaries of the neighborhood are part of the theoretical definition. The boundaries of a planned neighborhood should be obvious both from the written plan and from the physical layout of the neighborhood. Often to reinforce the neighborhood's identity, the neighborhood will be surrounded by a physical obstruction, generally a highway or major street.

The straightforward methodology for locating a planned neighborhood is as follows:

<u>Identifying Characteristics</u>	<u>Required Data</u>	<u>Source of Data</u>
1. Planned Neighborhood (Neighborhood Unit)	1. a. Physical and visual boundaries b. Size	1. a. Plan Field Observations b. Plan Field Observations

### Visual Neighborhoods

Many neighborhood scholars believe that the physical environment is the underlying determinant of the boundaries for neighborhoods under all definitions. The principal boundaries of a visual neighborhood are paths and edges.<sup>15</sup> William Sims and Richard Warthen operationalized Lynch's vocabulary to locate neighborhoods in Columbus, Ohio. The elements of the physical environment that differentiated one neighborhood from another in their study were topography, streams and bodies of water, vegetation, railroads, highways and freeways, major streets, undeveloped land and land use. People were interviewed to determine how they perceived the boundaries of their neighborhood. Sim's and Warthen's findings were that people relied heavily on features of the physical environment to differentiate one neighborhood from another and they tended to "ignore subtle edges and to push their neighborhood boundaries outward until they encountered a really significant edge element."<sup>16</sup> From this, one may conclude that the size of a neighborhood is dictated by the existence of and people's exposure to a "significant edge element" like a river, a highway, a major street, or a park.

Below is the methodology for locating a visual neighborhood as recommended by Sims and Warthen.<sup>17</sup>

<u>Identifying Characteristic</u>	<u>Required Data</u>	<u>Source of Data</u>
1. Visual Unity	1. a. Location of edges and paths b. Areas of homogeneity of land use c. People's perception of neighborhood boundaries and unity	1. a. 1. Aerial Photograph 2. Detailed map 3. Traffic surveys b. 1. Aerial photograph 2. Land use map c. Interview

## 2.4 SUMMARY

Three distinct techniques for actually locating neighborhood boundaries emerged from the above discussion. These cut across all definitions and have varying levels of utility for locating neighborhood boundaries under each definition. The techniques are: interviewing, using published figures, and making direct observations. Through interviews and survey techniques, one may gather information on people's neighboring and mobility patterns, values, criteria for selecting a neighborhood, their feelings about their own neighborhood and its identity vis a vis its surrounding areas, and their visual image of their neighborhood. A survey may also yield useful information about the respondent and his home. In particular one may learn: his age, sex, income, employment level, education level, and the value, size, tenure and quality of his home. This provides information useful in locating neighborhoods under each definition and the major way to study the cohesive neighborhood.

The most important source of published data is the decennial census. At the tract level one may extract detailed information on the characteristics of the population and their housing. This is the basis for Social Area Analysis and an important source of information

for studying housing submarkets. Census data, however, defines neighborhood boundaries that may not reflect the true size and shape of the neighborhood being analyzed. There are also publications containing data on housing sales, which may also be useful.

Finally, through direct observations, one may actually look for differences among areas and the boundaries between areas. Some of the features one may look for are: housing quality, race of residents, amount of interaction among residents, amount of outdoor activity, condition and cleanliness of streets and sidewalks, quality of merchandise in stores, types and location of institutions, and the location of physical obstacles or edge elements.

We now have a theoretical framework for six different neighborhood definitions and a set of techniques useful for locating neighborhoods under each definition. In Chapter 3, we shall use many of the operational definitions established in this chapter to locate neighborhoods in our study area, Jamaica Plain and to evaluate the various techniques and data bases available to a neighborhood analyst.



## Footnotes: Chapter 2

1. Ruth Glass, The Social Background of a Plan (London: Routledge and Kegan Paul Ltd., 1948) pp. 18-19.
2. Ibid., p. 20.
3. Terence Lee, "Urban Neighborhoods as a Socio-Spatial Schema," Environmental Psychology: Man and His Physical Setting, eds. Harold M. Proshansky, William H. Ittleson, Leanne G. Rivlin (New York: Holt, Rinehart and Winston, Inc., 1970), p. 350.
4. Herbert Gans, The Urban Villagers (New York: The Free Press, 1962).
5. Wendell Bell and Eshref Shevky, Social Area Analysis (Stanford: Stanford University Press, 1955).
6. Conversation with Richard Coleman, Summer 1974.
7. Amos H. Hawley and Otis Dudley Duncan, "Social Area Analysis: A Critical Appraisal." Land Economics, XXXIII, (November, 1957), p. 328.
8. Ibid., p. 339.
9. U.S. Department of Commerce, Census Tract Manual (Washington, D.C.: Bureau of the Census, January, 1966, 5th edition, p. 36.
10. Ibid., p. 1.
11. Kenneth Suchan, "Heterogeneity in Residential Neighborhoods," (unpublished Master's thesis, Department of Urban Studies and Planning, Massachusetts Institute of Technology, 1964.)
12. A "segregated area" is a group of census tracts having a larger proportion of: "Negro", "Other Races" and "foreign born white," than the city as a whole. See Bell and Shevky, Chapter VI.
13. William Grigsby, Housing Markets and Public Policy (Philadelphia, Pa.: University of Pennsylvania Press, 1963), p. 34.
14. Richard P. Coleman, Seven Levels of Housing: An Exploration in Public Imagery. (Cambridge: Joint Center for Urban Studies of the Massachusetts Institute of Technology and Harvard University, Working Paper No. 20, April, 1973.)

15. Kevin Lynch, The Image of the City. (Cambridge: The M.I.T. Press, 1960.)
16. William Sims and Richard Warthen, Neighborhoods: Columbus Neighborhood Definition Study (Columbus, Ohio: Department of Development, 1973)
17. Ibid. pp. 109-112.

### Chapter 3: A Case Study of a Neighborhood: Jamaica Plain

In Chapter 2, a set of alternative methods for locating neighborhood boundaries was developed. In this chapter, we shall apply many of these methods to the Jamaica Plain section of Boston to: first, determine whether or not neighborhood boundaries differ according to the emphasis placed on each of the different elements of a neighborhood and second, to determine which of the operational criteria one may easily use and which in practice are more difficult to apply.

We shall first briefly describe the reason Jamaica Plain was selected as the case study area. The history of Jamaica Plain and the way in which the area was originally settled will serve as a backdrop for the subsequent application of the neighborhood definitions to Jamaica Plain. The data used in applying the various definitions will be presented on charts and the boundary lines that emerge from each definition will be plotted on maps. From this, we will be in a position to determine whether a difference in neighborhood definition yields a different geographic area. Following this, will be a discussion of the problems encountered in conducting the analysis.

#### 3.1 BACKGROUND OF JAMAICA PLAIN

Boston has the reputation of being a city of neighborhoods. As Langley Keyes observed,

Despite her age and relatively small size, Boston is not a geographically or historically integrated community: she grew during the nineteenth century by annexing independent towns on her borders, towns that kept their original names and, often, their sense of separate identity. These geographic divisions are heightened by the ethnic parochialism which characterizes Boston's social system.

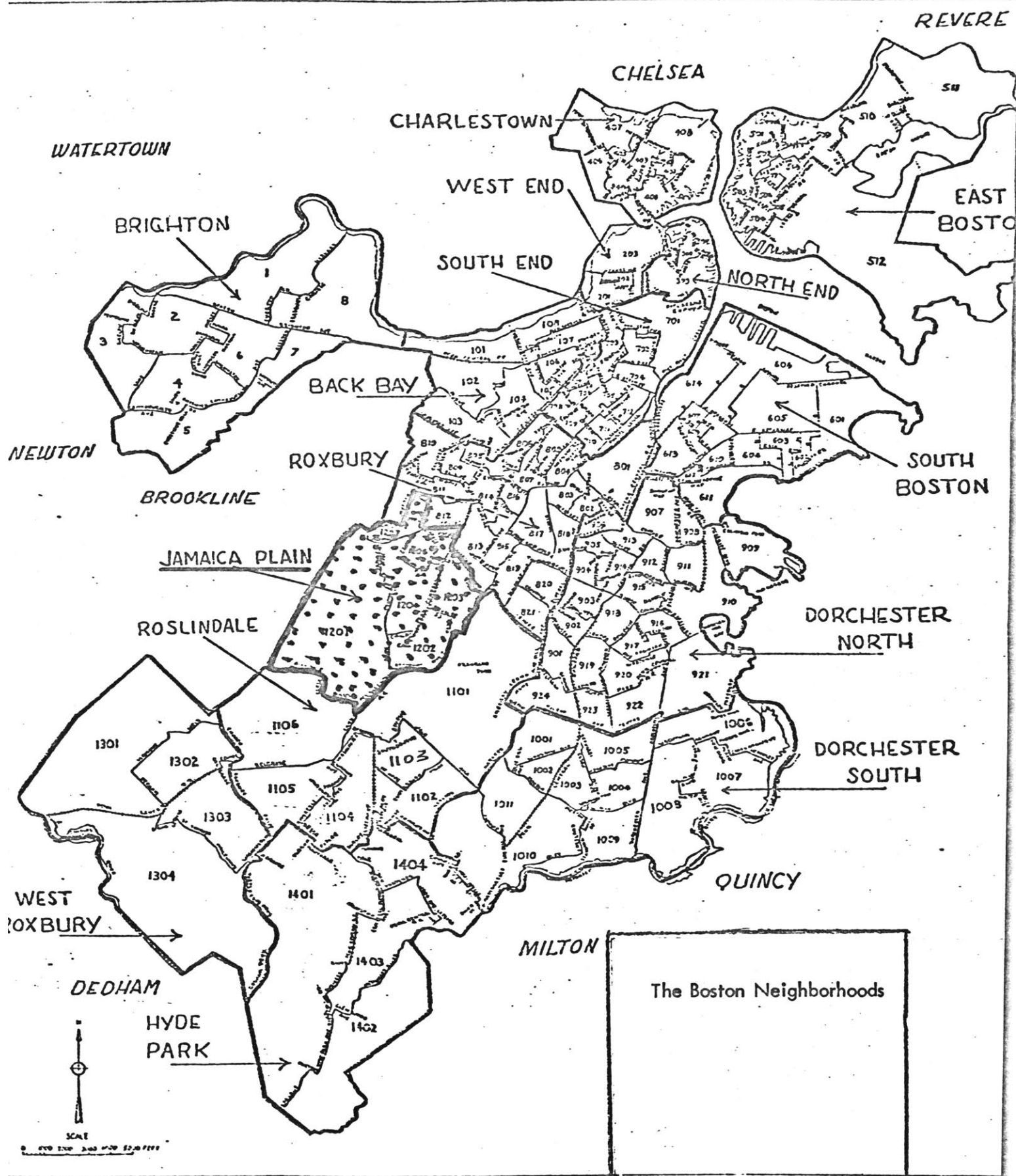
Some of the Boston neighborhoods are: Roxbury, Dorchester, the South End, Charlestown, and Jamaica Plain (see map 3. 1).

Many of the other older cities such as Chicago, New York and Philadelphia also have a variety of ethnic neighborhoods and annexed towns each with an identity of its own. The newer, more sprawling cities of the midwest and west, though more homogeneous than the port of entry cities, did grow through the annexation of towns and developments, each of which generally maintained its original name and sense of identity. Sims and Warthen found this to be the case in Columbus, Ohio as did Richard Coleman in Kansas City.<sup>2</sup>

### Selection of Case Study Area

In selecting the neighborhood of Boston to be used in this case study, we intentionally avoided three extreme cases: first, a clearly ethnically homogeneous enclave; a geographically isolated subdivision; and third, a highly unstable transitional neighborhood. Instead, we chose a recognized Boston neighborhood, which is not clearly defined by its image or reputation, or by a casual first impression.

In the first case, we avoided the Black ghetto neighborhoods which exist in most northeastern cities. These neighborhoods are generally a result of discrimination in both the housing market and the job market. In the case of Boston, this eliminated Roxbury, and North Dorchester from the analysis. We also avoided other ethnic enclaves like Irish Charlestown and the Italian North End. These represent a very special situation where people of a common background have chosen to remain in a defined geographic area. All



Map # 3.1

Source: United Community Services

of these neighborhoods have a clearly dominant culture and largely self-contained social life. In addition, Charlestown is geographically set off from the rest of Boston, further reinforcing its unique identity. Although ethnically homogeneous neighborhoods have their own stratification systems and internal differentiation,<sup>3</sup> we preferred to analyze a less obviously defined enclave. A study of an ethnically defined area would also require delving into the culture and background of that group. This is a study of neighborhoods, not a study of the specific case of the ethnic neighborhood.

At the other extreme we avoided the transitional neighborhood whose population, housing values, and institutional network are obviously in flux. In this type of neighborhood, neighborhood boundaries are highly unstable and all the characteristics of a neighborhood are constantly changing. In Boston, this eliminated the South End, an old, low-income area, recently "rediscovered" by young professionals. Neighborhoods with large numbers of students were also avoided because of the transient nature of the student population. In these cases, the identifying characteristics of a neighborhood are changing too rapidly to be analyzed with existing data.

Each of these types of neighborhoods would make very interesting case studies of particular types of neighborhoods recognizable in most large cities. We, however, chose as our study area, a less apparently defined and more stable neighborhood. Jamaica Plain does not have a commonly known image nor is it experiencing drastic and highly publicized changes. Jamaica Plain, like many other areas requires some digging to be understood.

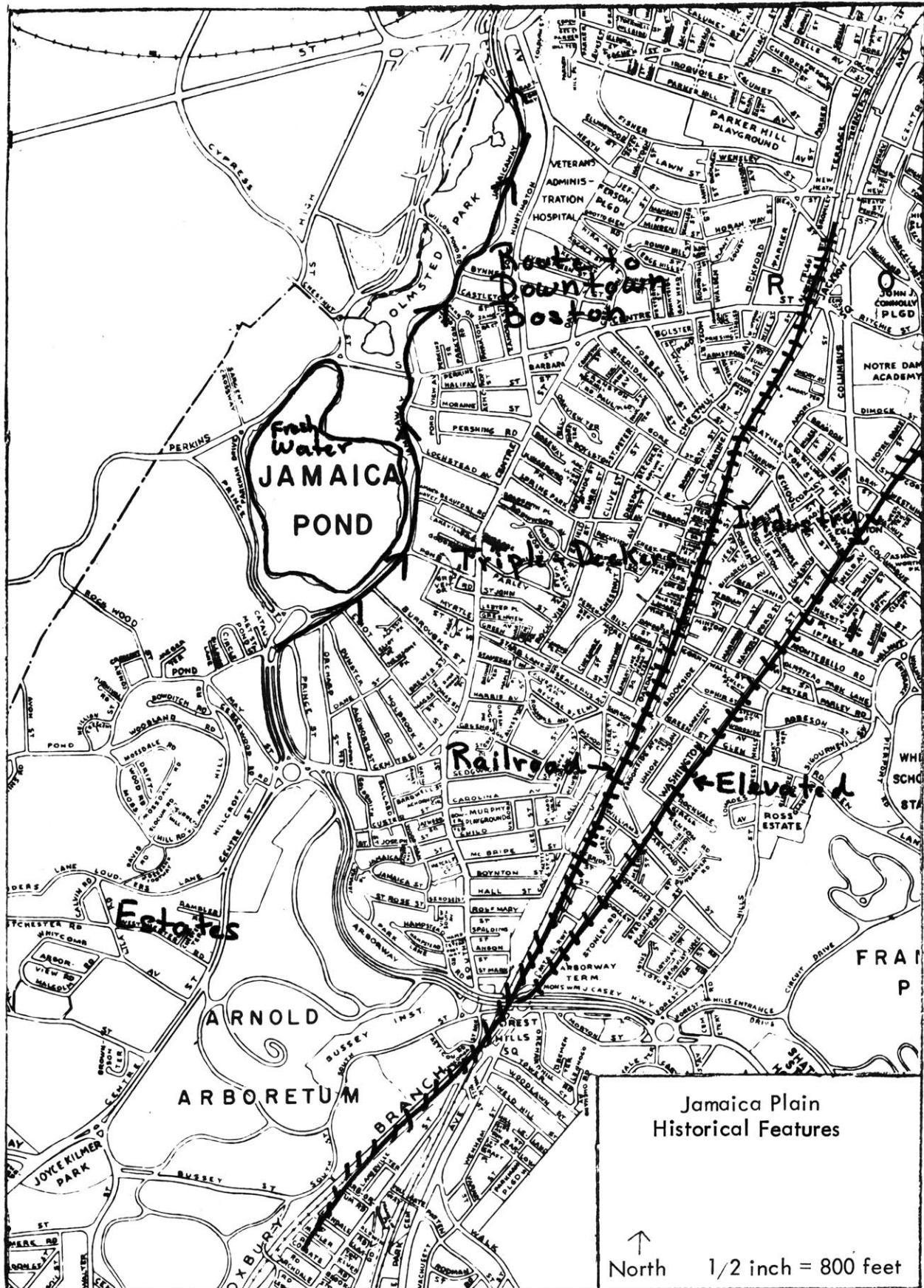
We cannot definitively say that Jamaica Plain is typical of urban areas, but the findings that emerge from this case study will at least open up some questions as to what is meant

by a neighborhood and what constitutes neighborhood change. Our findings will also provide a basis for developing a methodology for locating neighborhoods suited to the purpose of a particular investigator.

### The History of Jamaica Plain

Jamaica Plain is located in the west-central section of Boston (see map 3.1). It was originally part of the town of West Roxbury until it was annexed by the city of Boston in the last nineteenth century. Unlike many of the other neighborhoods of Boston, Jamaica Plain was not a separate municipality before annexation. This has contributed to the ambiguity that has arisen over the years as to the actual boundaries of Jamaica Plain.

Jamaica Plain was originally settled as an area of large estates and farms. In 1826, a railroad crossing was built through Jamaica Plain, followed shortly by the Forest Hills elevated trolley line. (see map 3.2). These two developments had a large influence on the future development of the area sandwiched between them. Because of these transportation links, because of Jamaica Plain's supply of fresh water from Jamaica Pond, and because of its supply of water power from Stoney Brook, Jamaica Plain attracted industrial development, especially breweries and machine manufacturing plants. Housing for the workers was built in this area and many Germans settled here to work in the breweries. Many of these factories have since closed, but their influence is still felt as a blighting force. With the loss of the industries, many of the skilled and unskilled workers also left to find housing and work elsewhere. Their houses were turned over to people of a lower socio-economic group.





The remaining sections of Jamaica Plain were settled as a middle-income residential area stretching out along the Arborway trolley line. Some remnants of the original estates remain in the southwestern section of Jamaica Plain. Traditionally, the attraction for settling in Jamaica Plain have been the easy access to downtown Boston and the band of parks and open space which surround most of the neighborhood.

### 3.2 AN APPLICATION OF THE NEIGHBORHOOD DEFINITIONS TO JAMAICA PLAIN

We shall now apply each neighborhood definition to Jamaica Plain to determine the ways in which Jamaica Plain qualifies as a neighborhood.

#### Cohesive Neighborhoods

In the first chapter, the cohesive neighborhood was described as a geographic area in which the residents had strong social ties to each other and a commitment to the area. The residents of a cohesive neighborhood were portrayed at the extreme as sharing confidences and providing mutual support. At their least they shared common institutions and facilities.

The most powerful methods described in Chapter 2 for locating a cohesive neighborhood were interviews with residents and participant observation. Both of these are quite labor intensive and require a longer time frame than was available for this study. We were therefore forced to rely on proxies that provide clues to the existence of cohesive neighborhoods but may not be considered definitive evidence. The proxies used in this study are: interviews with people knowledgeable about the community, plotting the

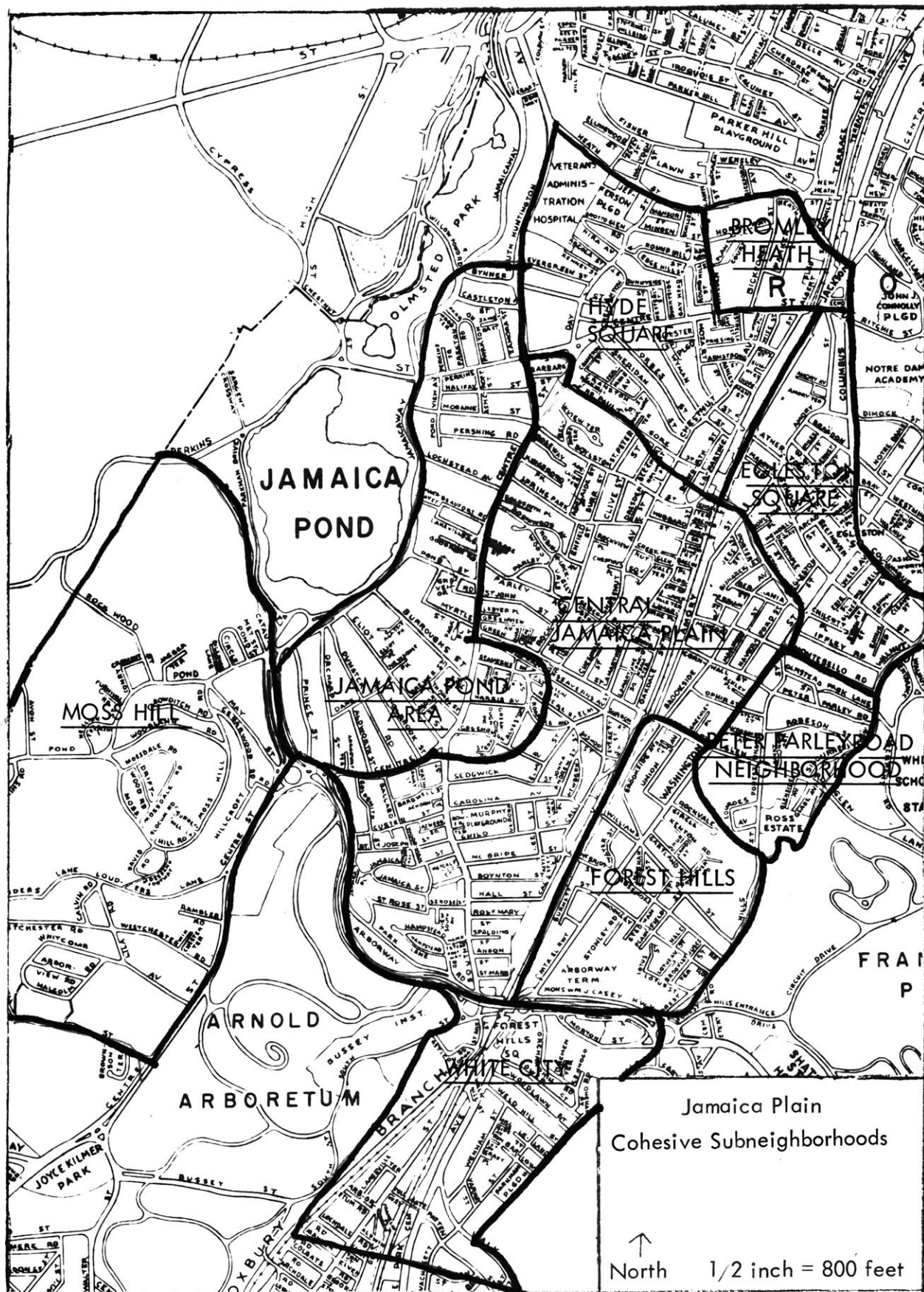
location of local institutions, and a visual survey of the commercial facilities. These all may provide information on the degree of concentration of residents' social activities.

Several informants identified Jamaica Plain as an aggregation of smaller subneighborhoods, some of which are organized around neighborhood associations or clubs.<sup>5</sup> Each of these subneighborhoods also has a name which helps reinforce a sense of local identity. The people living in these subareas were identified as generally knowing their neighbors and sharing common interests. Residents are believed to identify more with their subarea than with Jamaica Plain as a whole (map 3.3). These are probably larger than a cohesive neighborhood that is defined as the locus of people's regular social interactions.

Locating these subneighborhoods has been particularly useful to those operating the Jamaica Plain Little City Hall, to community organizers, and to local realtors in that each subneighborhood contains a separate interest group with particular housing needs. The informants who identified the subneighborhoods did not use any specific analytical skills. They instead relied on their own experiences and their knowledge of the people living in the area.

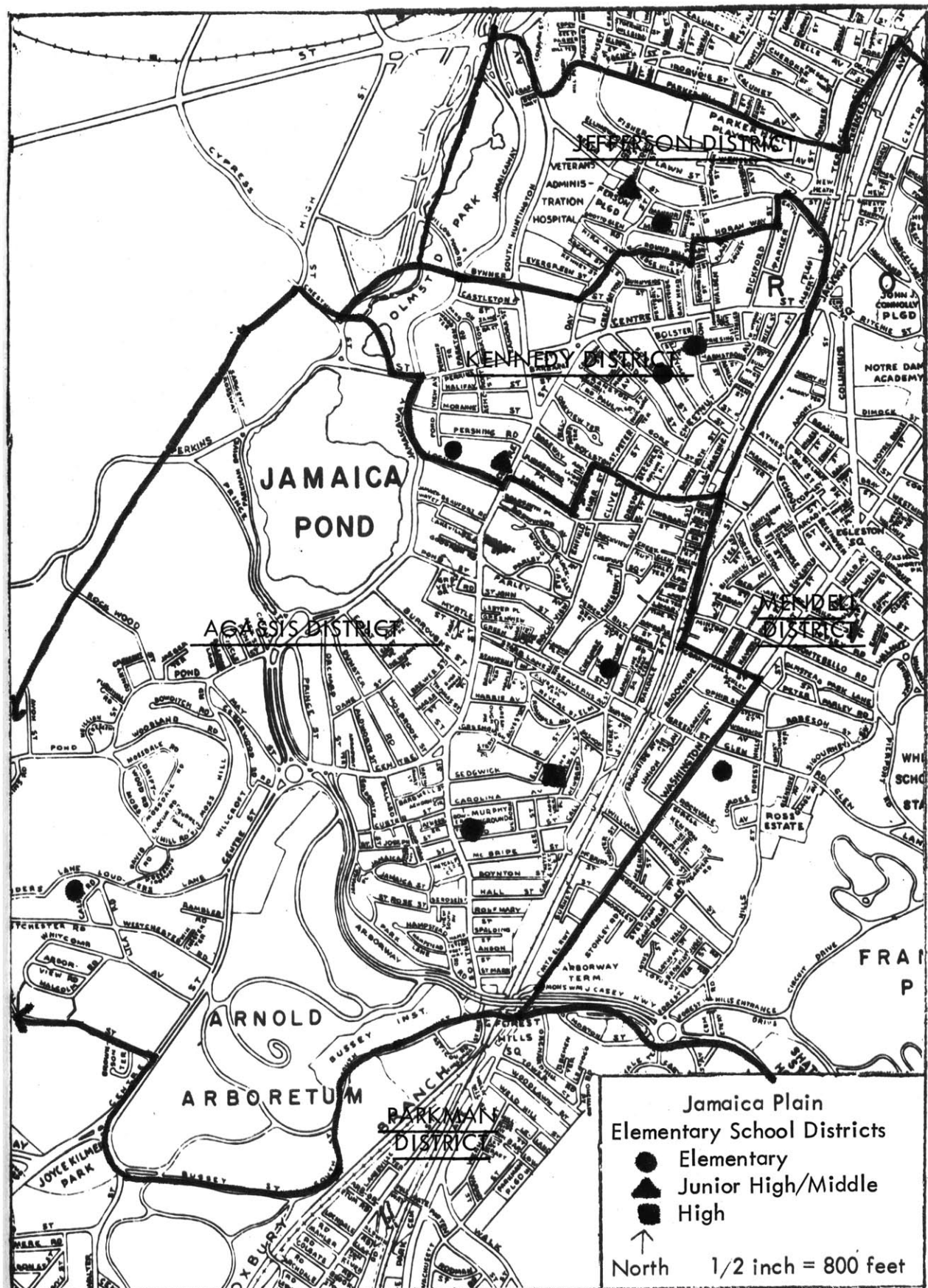
Borrowing from Ruth Glass's methodology, described in the previous chapter, we compiled a map of the public school districts and the parishes of the Catholic churches in the area (see maps 3.4 and 3.5). We also conducted a field survey of the types of commercial facilities in Jamaica Plain to determine their potential users (see map 3.6).

In some instances the elementary school facility or a church serve as the focal point for an area's social life. This is often the case when there is a strong PTA or when the facility itself is used for such community activities as bingo, rummage sales, or community



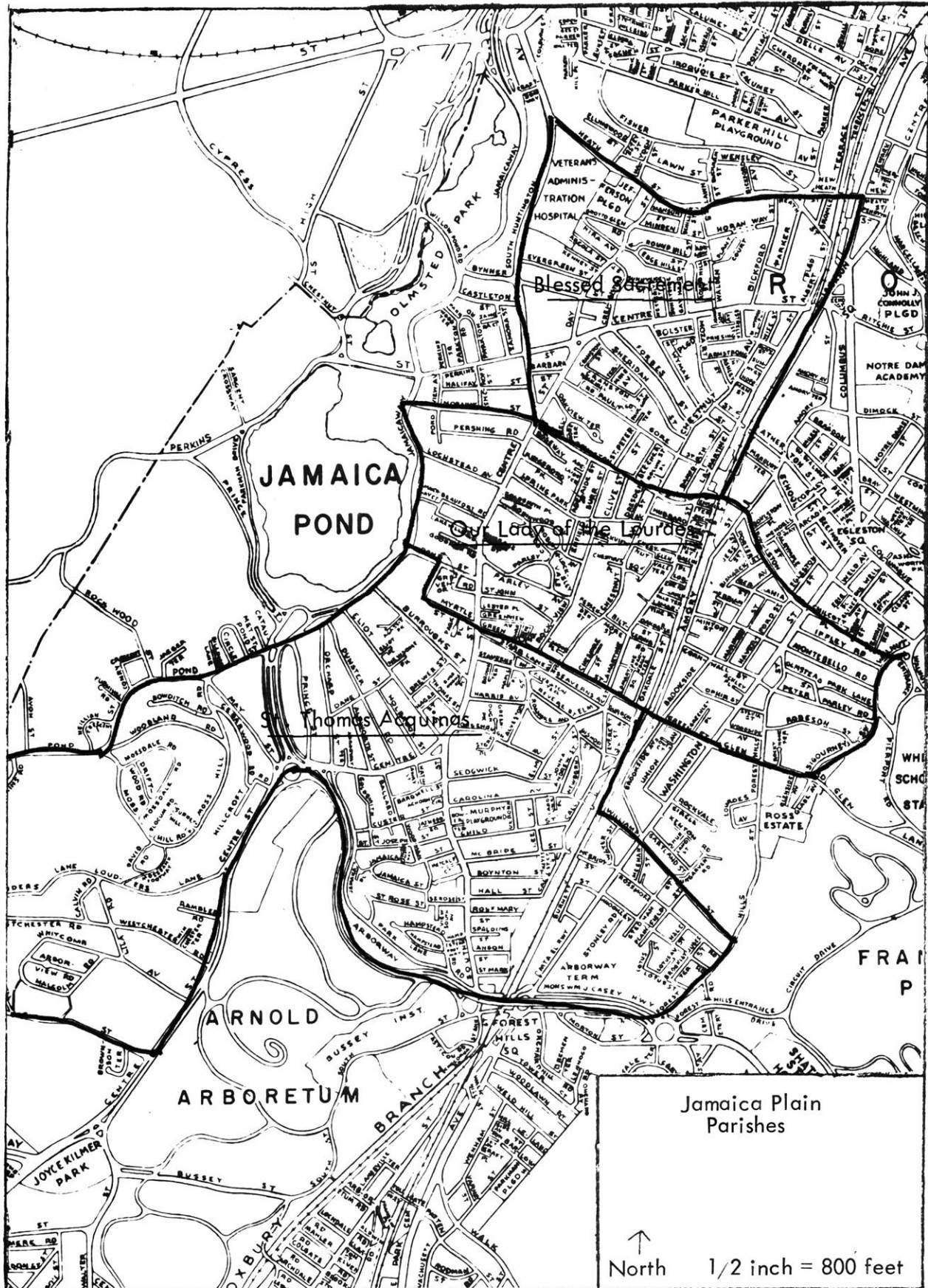
Map # 3.3

Source: Boston Redevelopment Authority Map # D-36



Map # 3.4

Source: Boston Redevelopment Authority Map # D-36



Map # 3.5

Source: Boston Redevelopment Authority Map # D-36



meetings and entertainment. The tie to a church may be even stronger than that to a school facility because of the strong emotional element surrounding religion. There are many cases of neighborhoods maintaining their identity because of the dominance of the neighborhood church. The relative strength of these institutions for Jamaica Plain is again difficult for an outside analyst studying the neighborhood for a limited period of time to ascertain. This requires intensive interviewing and knowledge of people's social ties.

From interviews with community leaders, we were able to gain some understanding of the impact of the local institutions on neighborhood formation. The Agassiz School is often used as a meeting center for various neighborhood associations and often sponsors community activities. However, it is not clear whether the surrounding school district is a cohesive neighborhood or whether the fact that the school is a new, well designed facility accounts for its heavy use. The existence of a positive focal point can potentially lead to stronger social ties for the people using the facility and provide the impetus for a cohesive neighborhood to develop over time. The other schools are rarely used as meeting places for community residents.

The St. Thomas Aquinas Church has helped keep the Irish community in the environs of South Street in tact. Although the actual parish extends to the western border of Jamaica Plain, its drawing power is focused in the South St. area and to the east. This is a more highly homogeneous and less mobile population than that in the western part of the parish. People who live in the farthest east section do have friends who live near South St. because of the social arena provided by the church. Our Lady of Lourdes is also

important for the people immediately surrounding the church. A former mayor of Boston, James Curley helped build the church and former mayor John Collins, belonged to this Church. This indicates the historical significance of the church in the life of Jamaica Plain. Again, to truly understand the role of the church as a focus for a cohesive neighborhood in Jamaica Plain would require an indepth investigation of each church's activities, attendance patterns, and membership trends. Even this is not adequate to determine the degree to which the parishioners regard the church as an important social institution nor to determine the level of closeness among church members. This type of information can only come from the residents themselves.

Given the data on institutional networks available to the short term, outside analyst, it does not appear as if Jamaica Plain qualifies as a single cohesive neighborhood. The high school, an institution that does span the entire neighborhood, is not often used for community activities. Because of the large size of Jamaica Plain, there are several elementary schools and churches in the area. Further investigation is required to ascertain the level of resident committment to these institutions and the degree to which they serve as magnets for smaller cohesive subneighborhoods.

A windshield survey of the commercial facilities in Jamaica Plain revealed the existence of several local shopping districts. Jamaica Plain is characterized by strip commercial type of development with very little parking space. This indicates that the area is geared to the local trade of people who can walk to the facilities. The exclusive use of commercial facilities by nearby residents is a proxy indicator of a cohesive neighborhood. Although we do not have figures on where Jamaica Plain residents shop nor who the

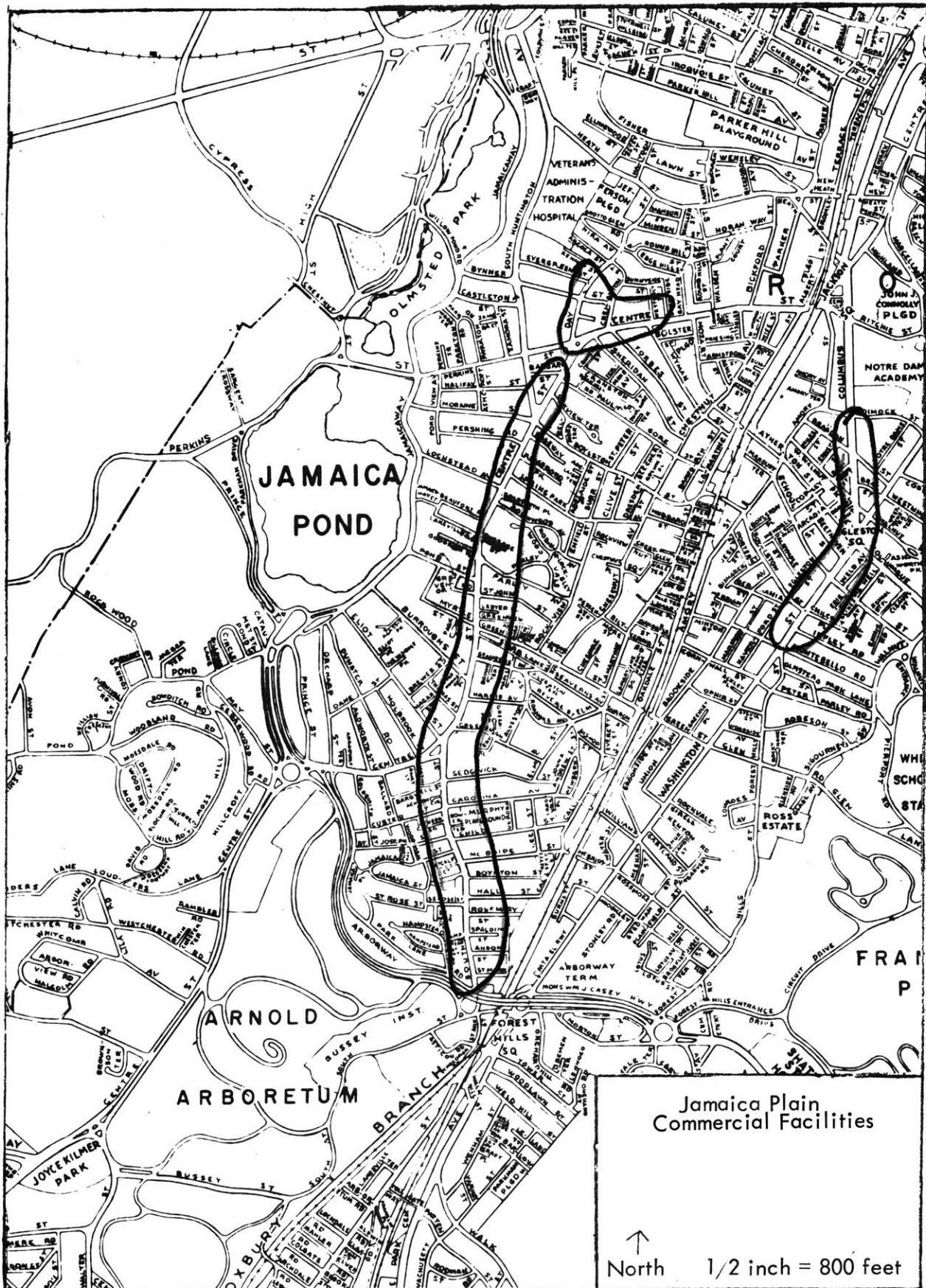
primary users of the Jamaica Plain stores are, the nature of the shopping areas makes it highly likely that they are primarily used by nearby residents. However, as we shall explain, nearby residents do not necessarily use the local stores exclusively.

There are three distinct shopping areas, each appealing to a particular clientele (map 3.6). All three areas contain primarily small stores, in particular, drug stores, liquor stores, and variety stores with relatively inexpensive and lower quality merchandise.

The shopping district near Day St. and Centre St. is oriented toward the Spanish community and the remaining Irish population. There are several Spanish-owned grocery stores and luncheonettes and a sprinkling of Irish-owned and operated establishments. Primarily small food stores are located in this area. They serve the surrounding residents. Most of the stores are privately owned and managed. This adds an element of familiarity to the relationship between the store owners and their patrons. This shopping area is also quite compact, focusing all activities in a small area. All of this further substantiates the potential existence of the Hyde Square cohesive neighborhood suggested by the community leaders. The past several summers, however, there have been fights in the shopping area between the Anglo and Spanish-speaking teen-agers, diminishing the potential cohesiveness such a shopping area could foster.<sup>6</sup>

A similar, but lower quality shopping district is located along Washington St., near Egleston Square. Again, there is a mixture of Spanish and Irish operated establishments to serve the surrounding residents. This area is situated in the shadows of the Washington St. elevated transit line and is known as one of the city's higher crime areas. The stores are interspersed among industrial establishments and many stores are boarded up and vacant.





Map # 2.6

Source: Boston Redevelopment Authority Map # D-36

This environment would tend to negate any potential social function such a shopping district might have served for the surrounding community.

The largest shopping area stretches along Centre St. and South St. Here are found several lower-priced clothing stores, chain stores, and banks. There is little parking space nor is there a variety in the quality range of products sold. For these reasons, this area may also be seen as serving a local clientele. Because it is long and not concentrated, this shopping area would have less chance of serving as a social nucleus than the Hyde Square shopping area which is more concentrated.

On the basis of several interviews with residents of Jamaica Plain, it is clear that the wealthier more mobile residents living in the Pond Area, Central Jamaica Plain, and Moss Hill (see map 3.3) feel forced to do their food and clothes shopping in suburban stores that carry merchandise that more closely suits their tastes. Jamaica Plain also does not have entertainment or restaurants serving the tastes of a higher income population. The lack of variety in the quality of merchandise offered in the local stores may help to reinforce interaction among people of similar background, thus reinforcing a potential cohesive neighborhood, but it further separates people of varied background and varied socio-economic status.

The information provided by the proxy indicators described above is far from definitive, but it does appear that Jamaica Plain itself is not a cohesive neighborhood. Only selected groups use the Agassiz School, the churches are only used by the nearest residents, and each shopping district serves a particular client group with some higher income residents not served at all within Jamaica Plain. There is, however, some evidence of cohesive subneighborhoods within Jamaica Plain. First, are the subneighborhoods seen by the leaders

in the Jamaica Plain community. Second, the Catholic Church and the Agassiz School offer activities and companionship for those living nearby. Finally the homogeneity of the quality of merchandise offered in the three shopping areas, their convenience to the surrounding residential areas, and the compactness of the Day St. shopping district all again point to potential nuclei of social interaction. This is, however, undermined by the existence of racial conflicts in Hyde Square and the poor quality of the Washington St. environment.

If we have located truly cohesive neighborhoods, it appears that even within a single neighborhood definition, a different source of data, or emphasis will point to a different set of boundaries. In addition, the literature suggests that only discrete areas within the city are cohesive neighborhoods. Those cited in this study are potential nuclei for social interaction but not necessarily true cohesive neighborhoods. The actual strength of each of these potential nuclei of subneighborhoods requires further first hand investigation to be substantiated.

### Homogeneous Neighborhoods

In Chapter 2, we grappled with the question of what constitutes homogeneity. An alternative to searching for a measure of homogeneity, although less precise, is to assume that each census tract is a reasonably homogeneous unit as it was initially intended to be and aggregate tracts according to their place on a socio-economic index based on: average family income, average years of schooling, and percent white collar heads of households.<sup>7</sup> The exact formula to be applied in this study is:

$$SEI = \frac{\text{ave. income tract}}{\text{ave. income Boston}} \times \frac{\text{ave. education tract}}{\text{ave. education Boston}} \times \frac{\% \text{ white collar male tract}}{\% \text{ white collar male Boston}}$$

The index described above is similar to that suggested by Bell and Shevky in their Social Area Analysis but this index avoids some of the problems resulting from Bell and Shevky's now outdated assumptions concerning demographic trends. The application of this socio-economic index to our study area indicates that Jamaica Plain is not a homogeneous neighborhood, even according to this more relaxed notion of homogeneity based on census tracts, but is instead split into three sections: one of low socio-economic status relative to Boston, one of medium status, and one of high socio-economic status relative to Boston (see table 3.1 and , map 3.7).

The subneighborhoods within Jamaica Plain may also be distinguished from one another on the basis of the components of the socio-economic index: income, occupation, or education and on the basis of race or nationality. To more carefully locate the homogeneous subneighborhoods of Jamaica Plain, we have turned to the tract level census and applied the following standard of relative homogeneity: a tract is homogeneous on a variable if the proportion of the population in terms of a particular characteristic exceeds the city's proportion of the population on that characteristic by ten percent. The prevailing characteristics for each tract in Jamaica Plain are circled on Table 3.2. In this case, every tract may be regarded as a homogeneous subneighborhood in terms of some set of characteristics.

This criteria comes into question on tracts such as 1204, where the proportion of wealthy people exceeds the city's proportion, but the modal group in the tract is \$5,000 to \$10,000. This criteria could then be refined to read, a tract is homogeneous if

Table 3.1

## Socio-Economic Index for Jamaica Plain Census Tracts, 1970

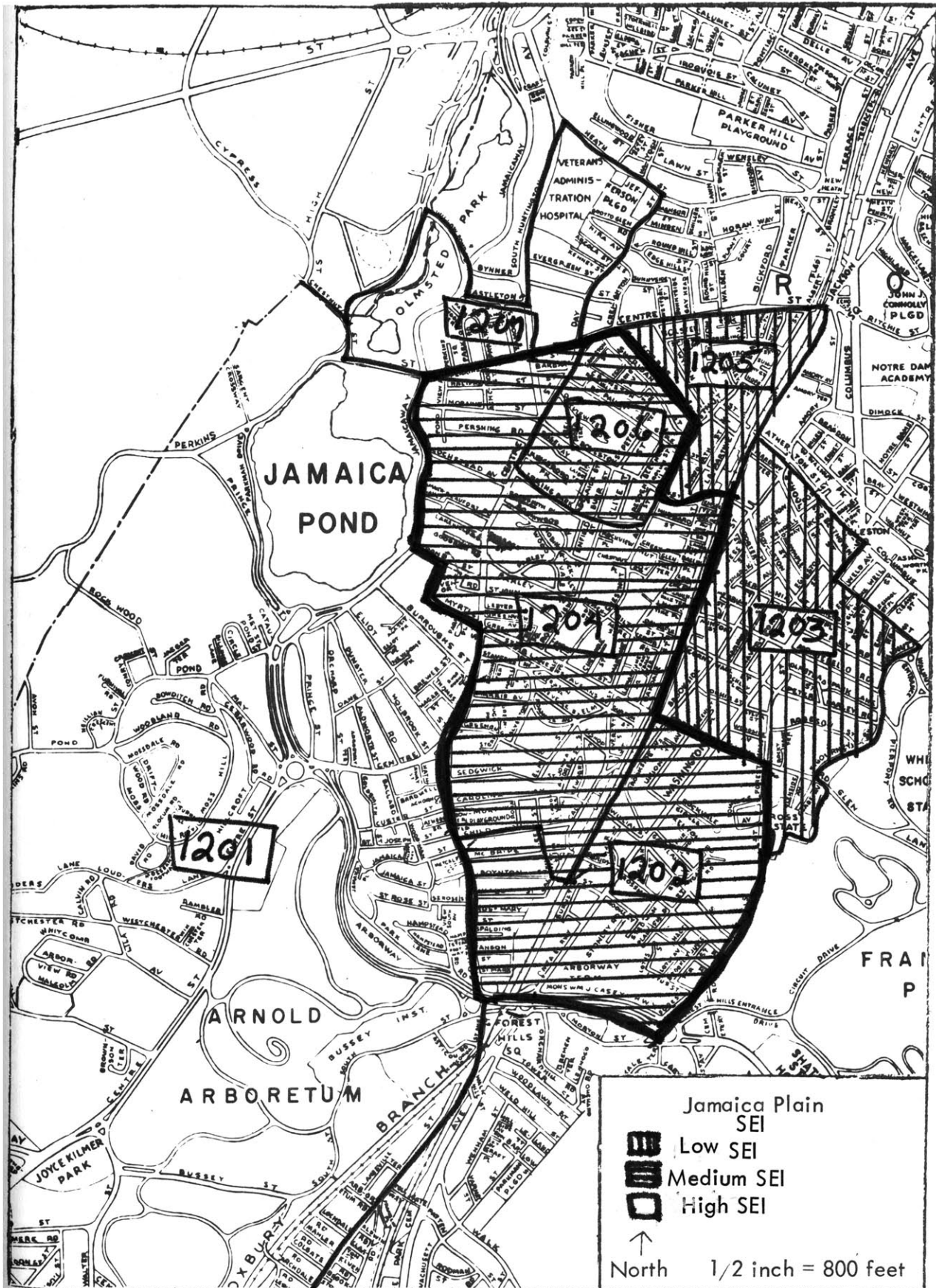
TRACT#	Income Ratio x	Education Ratio x	Occupation Ratio	= SEI	
1201	1.4	1.03	1.35	1.95	*High
1202	.97	.94	.86	.77	Medium
1203	.85	.84	.63	.45	Low
1204	.99	1.06	.84	.89	Medium
1205	.8	.79	.6	.38	Low
1206	.93	1.03	.67	.64	**Medium
1207	1.04	1.27	1.47	1.94	High

\*High =  $SEI \geq 1.33$ Medium =  $.67 < SEI < 1.33$ Low =  $SEI \leq .67$ 

} relative to the city of Boston

\*\*on border between low and medium, but classified as medium because of the large gap between Tracts 1203 and 1206

Source: U.S. Department of Commerce, Bureau of the Census, 1970 Census of Population and Housing: Census Tracts, Boston, Massachusetts, Standard Metropolitan Statistical Area.



Map # 3.7

Source: Boston Redevelopment Authority Map # D-36

Table 3.2

## Homogeneity

	<u>Boston</u>	<u>Tract</u> <u>1201</u>	<u>Tract</u> <u>1202</u>	<u>Tract</u> <u>1203</u>	<u>Tract</u> <u>1204</u>	<u>Tract</u> <u>1205</u>	<u>Tract</u> <u>1206</u>	<u>Tract</u> <u>1207</u>
<u>Education</u>								
< 8th grade	27%	16%	*34%	39%	30%	45%	31%	20%
High School	34%	34%	33%	24%	30%	28%	34%	33%
College	10%	21%	7%	5%	11%	3%	5%	21%
<u>Occupation (male)</u>								
White Collar	43%	58%	37%	27%	36%	26%	30%	63%
Blue Collar	56%	42%	63%	73%	64%	74%	70%	37%
<u>Income</u>								
< \$5,000	22%	11%	20%	24%	20%	29%	14%	13%
\$5,000-\$10,000	35%	24%	38%	42%	32%	45%	45%	27%
\$10,000-\$15,000	26%	27%	25%	21%	24%	18%	30%	25%
> \$15,000	18%	38%	15%	12%	24%	7%	16%	34%
<u>Ethnicity</u>								
Black	16%	1.8%	3.5%	8%	1.6%	3.1%	1.9%	.8%
Irish	8%	18%	11%	9%	13%	8%	17%	13%
Spanish	7.5%	1%	4%	12%	3%	28%	12%	5%

\*Circles designate those tracts that meet the following standard of homogeneity:  $\% C_x \geq \% C_{\text{Boston}} + 10\%$

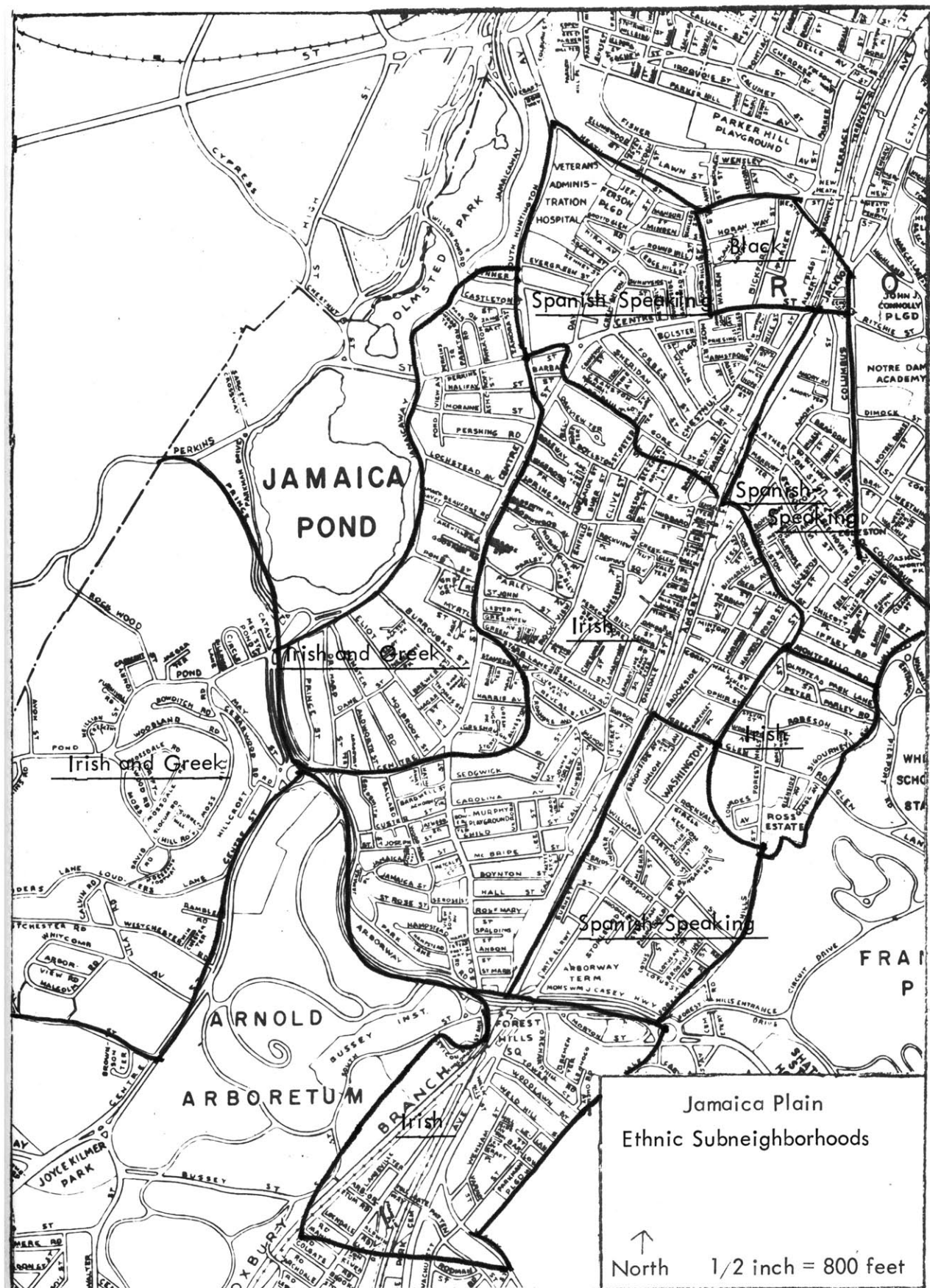
Source: U. S. Department of Commerce, Bureau of the Census, 1970 Census of Population and Housing: Census Tracts Boston, Massachusetts Standard Metropolitan Statistical Area.

the proportion of the modal group exceeds the proportion of that characteristic for the city as a whole by ten percent. In that case, tract 1204 would not be considered homogeneous in terms of any of the four designated income levels. Collapsing the categories of income to two groupings, under \$10,000 and over \$10,000, again results in each tract being homogeneous on one of the two categories. Therefore, not only is the criteria for homogeneity important in neighborhood analysis but also the number of subdivisions of the variable makes a difference in one's evaluation of a homogeneous neighborhood.

If an absolute measure of homogeneity were selected, such as 51 percent of the population as suggested in Chapter 2, fewer homogeneous subareas would exist. In fact, the only homogeneous subneighborhoods in Jamaica Plain according to this measure are those based on occupation which can only be one of two categories, blue collar or white collar. Again, if all the characteristics of the population were reduced to two categories, all tracts could be homogeneous using this standard. Conversely, if the categories of occupation were expanded to include clerical, professional, managerial, etc. there would probably be no homogeneous neighborhoods on the basis of this measure of homogeneity. The analyst must carefully choose the categories of a variable and the level of homogeneity that make sense for the work he is doing.

Jamaica Plain may also be subdivided according to the dominance of an ethnic or racial group. Homogeneity on this line entered into the delineation of the smaller cohesive neighborhoods illustrated on Map 3.3. The identifying ethnic group for each subarea is noted on Map 3.8. This is an example of the appearance of homogeneity rather than absolute homogeneity of population. This assessment closely matches the dominant





Map # 3.8

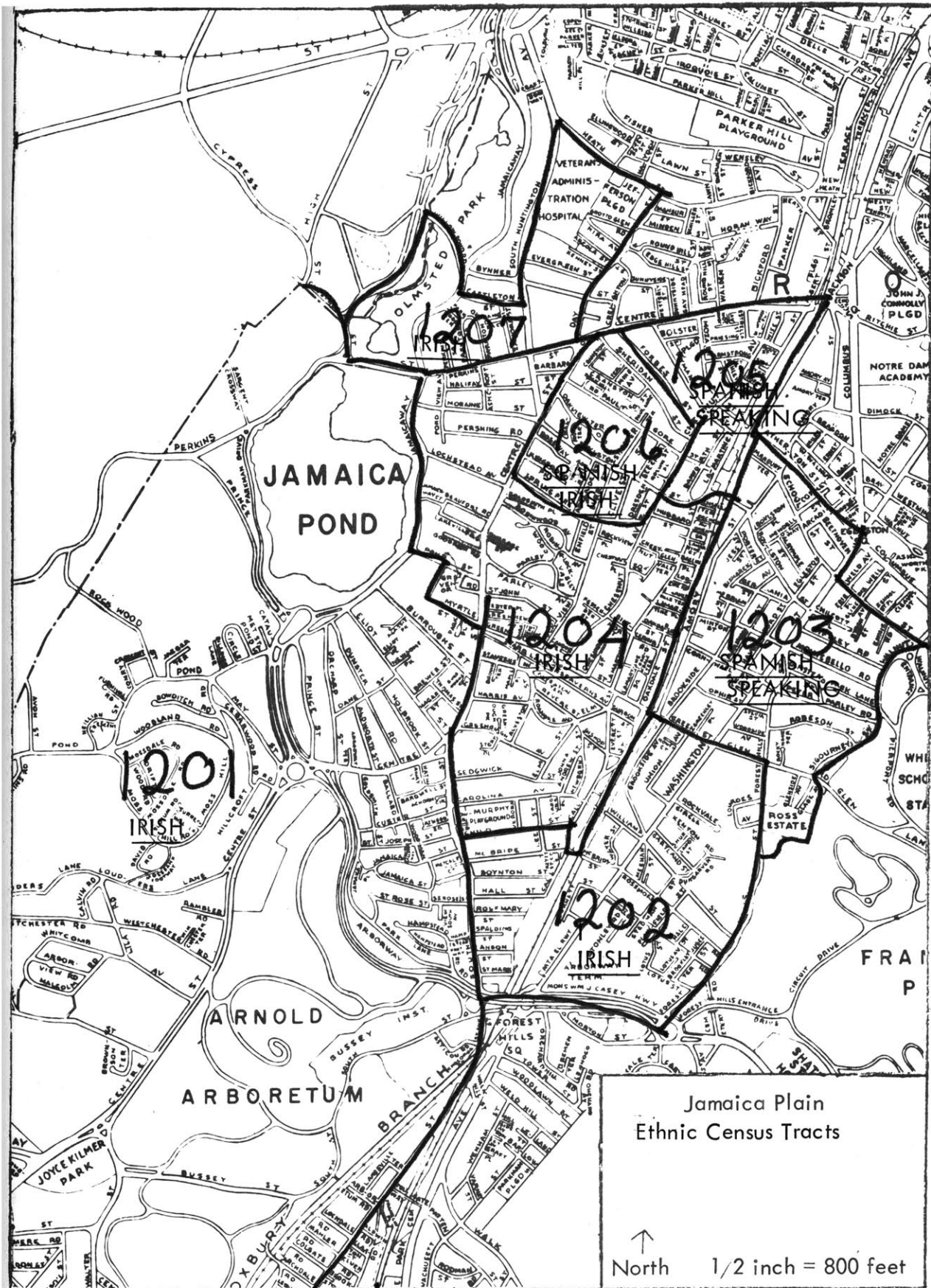
Source: Boston Redevelopment Authority Map # D-36

ethnic groups provided by census figures. We associated a tract with either Irish, black or Spanish residents if the proportion of the population in a particular group was greater than that for the city as a whole (see map 3.9).

This large split in the population of a commonly recognized neighborhood may appear unusual, but it does have its origin in the history of Jamaica Plain. The area was originally composed of estates, but over time, certain sections developed as industrial centers. The estates were further subdivided for residential development. Each change in land use provided housing for a different socio-economic group. Throughout all of these changes, Jamaica Plain maintained its identity as a neighborhood of Boston, yet it is no longer the homogeneous neighborhood it was in its very early history, nor is it recognized as homogeneous by its residents or by outsiders.

The question of whether all of Jamaica Plain is one homogeneous neighborhood has a quite obvious answer. The issue of whether homogeneous subareas within Jamaica Plain exist is far more difficult to answer using census data. Those portions of Jamaica Plain perceived as homogeneous along ethnic or income lines were shown to have even less than half their population in the identified grouping. There may be more clearly homogeneous subareas within tracts or that straddle tracts that gave rise to these stereotypes, but on the basis of the data available, this is not obvious.

The question of what proportion of the population in a particular category and within a particular geographic area is necessary for people to perceive the area as homogeneous is an important issue for future research. One may conduct a series of interviews within the geographic area under question and in nearby areas to determine whether the area is



Map #3.9

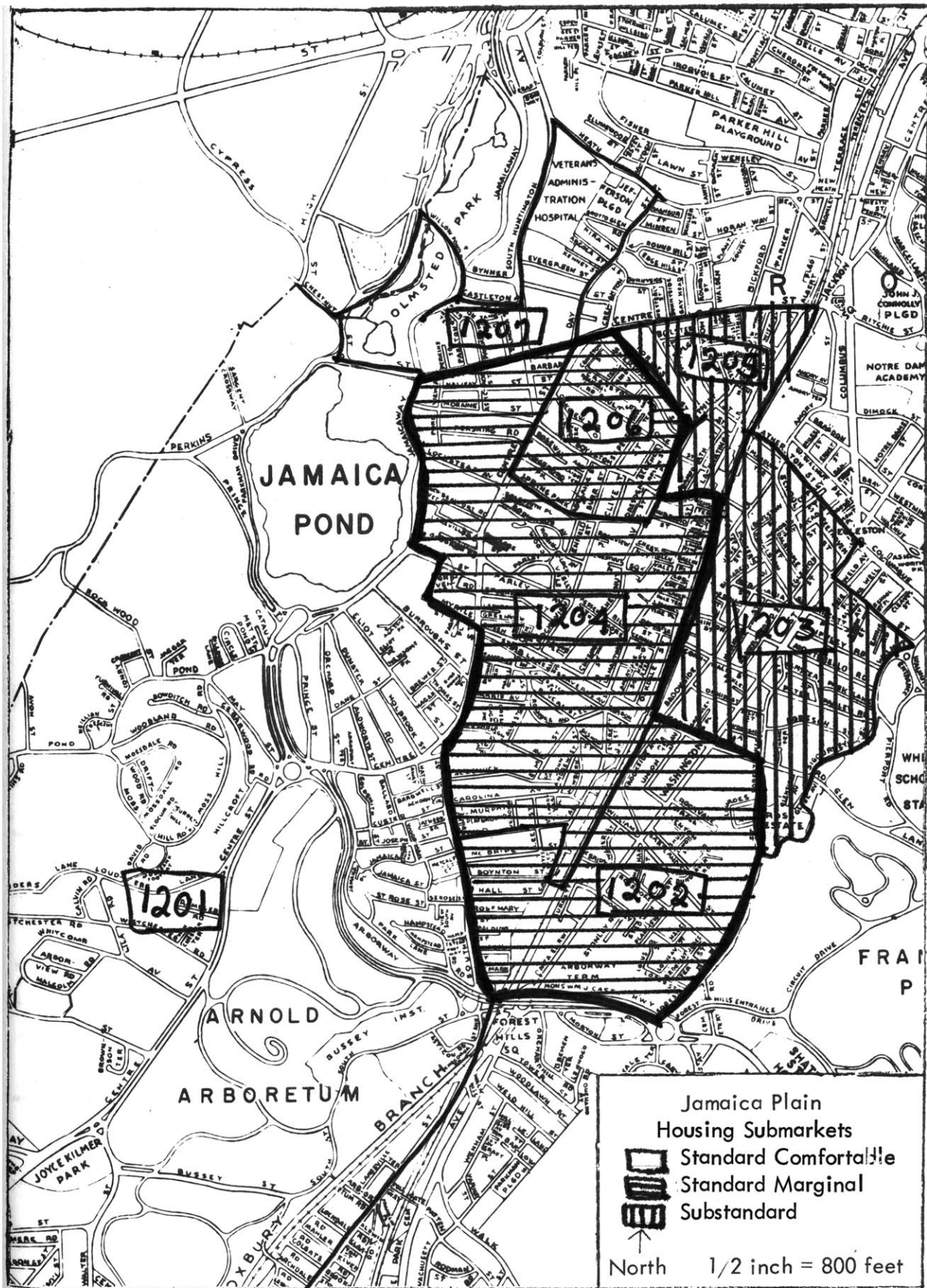
Source: Boston Redevelopment Authority Map # D-36

associated with a particular population type. These responses may then be compared to objective data to determine what level of similarity is required for an area to be identified with a particular population group.

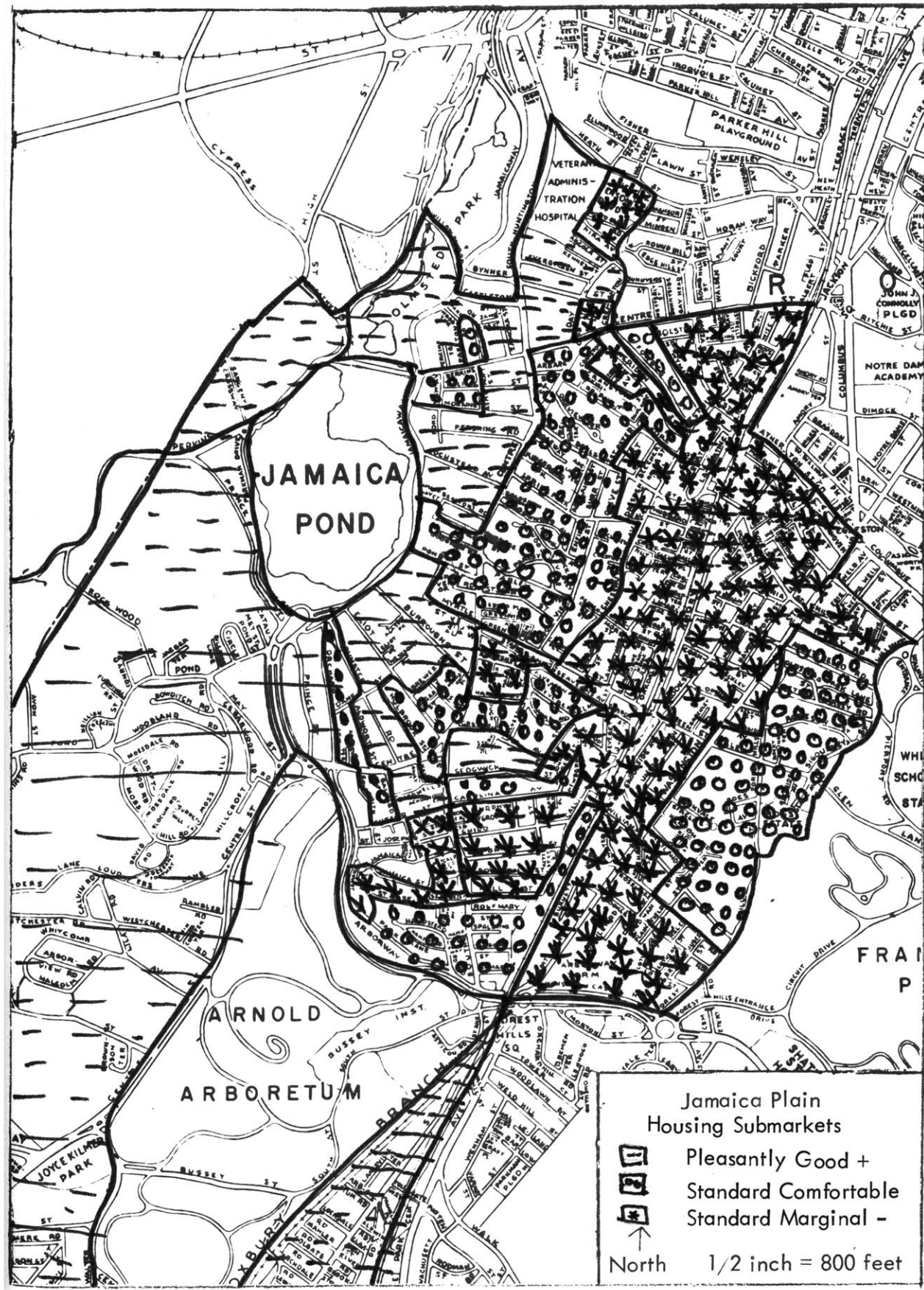
### Structural Housing Submarkets

The primary housing characteristic used for locating the boundaries of a structural housing submarket is the rent level or the value of the structures in an area. As noted in Chapter 2, Richard Coleman developed an index based on housing values and rent. When this index is applied using tract level data, it becomes clear that Jamaica Plain is not a single housing submarket but contains three different submarkets (see map 3.10). Further analysis at the block level reveals a lack of homogeneity within tracts and reveals submarkets that cross tract boundaries (see map 3.11). This further reinforces the fact that census tracts are not homogeneous. Within one tract, 1204, for example, the housing ranges from "substandard" near the railroad tracks to "pleasantly good" in the section bordering the pond. Using just tract data this wide variation is lost and the tract is homogenized into a "standard marginal" submarket.

In recent years, banks have begun to disinvest in the area east of Centre St. Throughout much of the length of Jamaica Plain, this line does separate "standard-marginal" from "standard-comfortable" housing. The area straddling the railroad tracks in the eastern section of Jamaica Plain, also known as the Southwest Corridor,<sup>9</sup> is a submarket of "substandard" housing, which could not be identified by looking either at the median housing values for Jamaica Plain as a whole or the values for census tracts. Coleman noted that







Map # 3.11

Source: Boston Redevelopment Authority Map # D-36

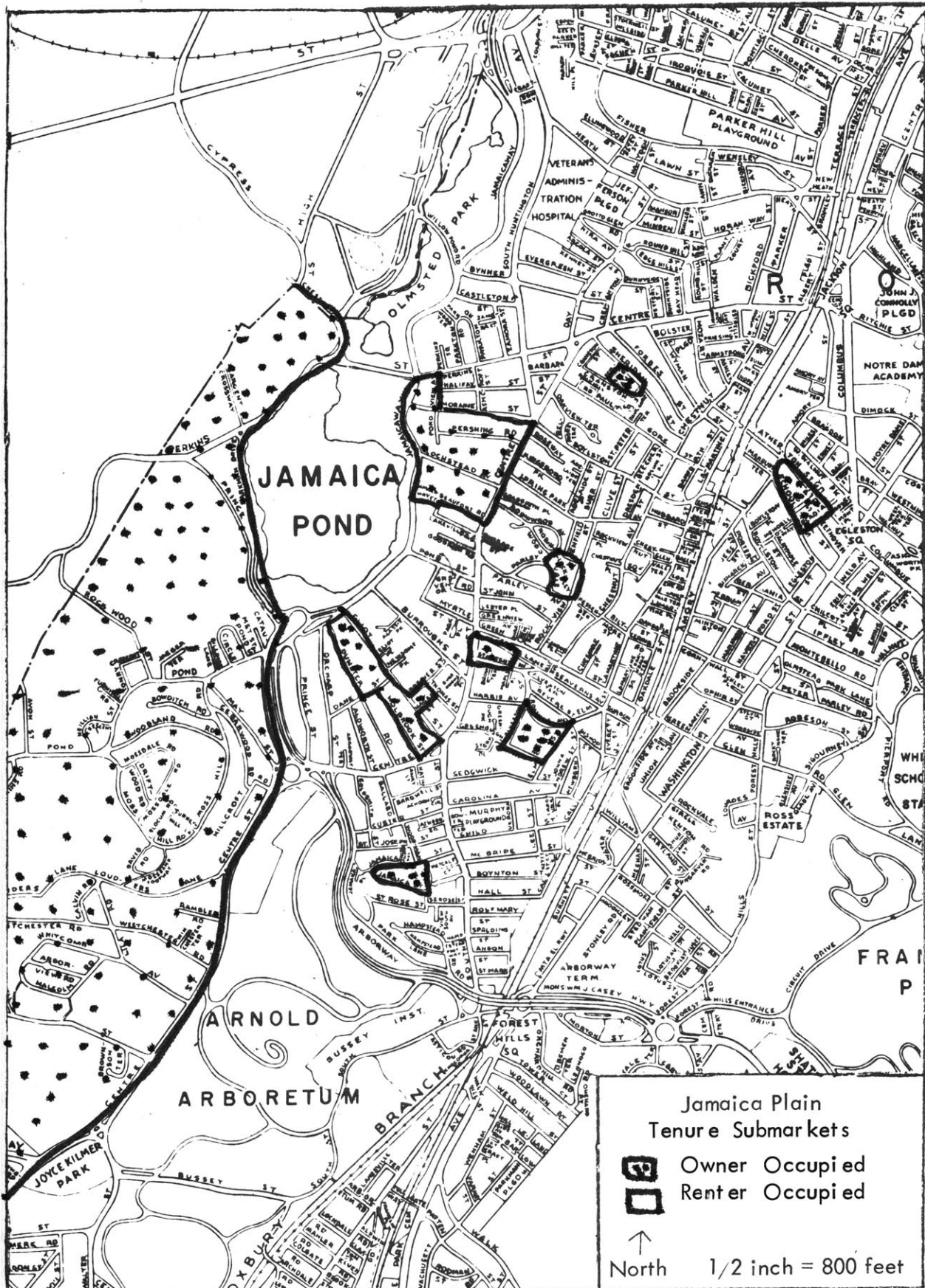
each level of housing, or in our terminology, each submarket, appeals to a different type of household. An understanding of these smaller subareas is therefore important for the decisions made by realtors, lenders, and perspective residents. A housing program may not treat Jamaica Plain as a single neighborhood if it is to successfully deal with the housing needs of the entire area.

### Occupancy Housing Submarkets

Occupancy housing submarkets may be differentiated from one another on the basis of tenure, and level of overcrowding. In our analysis of Jamaica Plain, we shall concentrate on just the first index. Knowledge of the predominant tenure type in an area is again important to prospective residents as well as policy makers. In older inner-city areas like Jamaica Plain, owner-occupied structures tend to be better maintained than rental structures. Some residents claim they can tell at a glance which dwellings are owner-occupied.<sup>10</sup>

Tenure does not provide a complete picture, however, because a luxury apartment building requires far different considerations than a tenement house. Similarly, an unheated owner-occupied shack does not provide the same security as a well maintained home. We shall later see whether the neighborhoods in Jamaica Plain defined according to the two different components of housing, rent or value and tenure are in fact the same.

Jamaica Plain, like most of Boston, is predominantly a rental submarket. The basis of the measure of homogeneity used was the form of tenure that represented greater than half of the units of a census block. Once again, however, all of Jamaica Plain is not a single submarket (see map 3.12). The western edge of Jamaica Plain constitutes a large



Map # 3.12

Source: Boston Redevelopment Authority Map # D-36



owner-occupied submarket. In addition, smaller areas surrounding Jamaica Pond are owner-occupied. This is not surprising because higher elevations and pleasant views tend to attract the most valuable types of housing. This is the only area of Jamaica Plain where mortgages are still readily available.

A trend in the western portion of Jamaica Plain is the construction of luxury apartment buildings. These primarily house wealthy professionals who enjoy the view of the park, the easy access to the hospitals just north of Jamaica Plain, and the easy access to downtown Boston. In a study of just tenure submarkets these areas may not be distinguished from the previous ones described. These distinctions will become clear when we overlay the different neighborhood definitions.

### Planned Neighborhood Units

The planned neighborhood unit as a neighborhood definition does not have relevance to our discussion of Jamaica Plain. Jamaica Plain developed incrementally in response to changing circumstances. At first it was a village of summer homes and estates with the double advantages of a beautiful landscape and easy access to downtown Boston. Over time, a rail line was built through Jamaica Plain, ushering in industrial development and large amounts of housing for the factory workers. Little by little many of the estates were subdivided to construct residential areas. Unlike the planned neighborhood which has a predefined development pattern, which includes the type and amount of housing the street pattern, and institutional network, Jamaica Plain just evolved piecemeal in response to changing demands not according to a plan. Schools and shops were built as needed by the

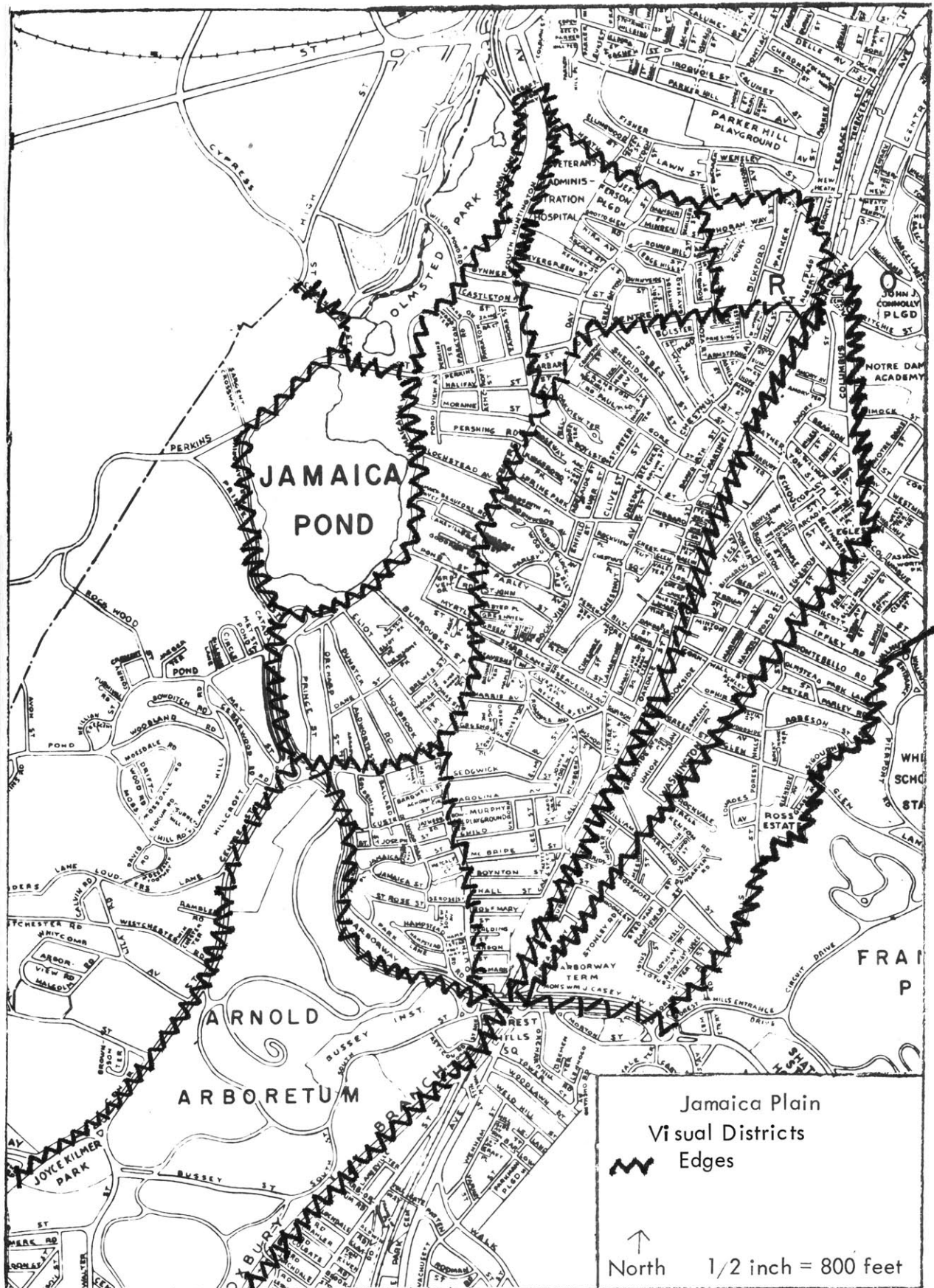
population. Many planned neighborhoods start with a school or shopping district as the determinant of the allowable population size.

### Visual Districts

Jamaica Plain may be defined as a single neighborhood which is almost totally separated from its surrounding neighborhood by physical boundaries or "edge elements" (see map 3.13). To the north, Jamaica Plain is separated from the Parker Hill area by a steep slope which begins its rise just north of Heath St. To the Northeast it is separated from Roxbury by the New Haven Railroad and an industrial belt. The western boundary is the least clear. It may continue along Columbus Ave, another obvious edge, down to Franklin Park. It may alternatively run along the Washington St. elevated trolley line, another visual boundary. The southern border is clearly the Forest Hills Cemetery and the Arnold Arboretum. The southwestern border is again slightly vague. It is a relatively undeveloped area merging with a similar area in Brookline with a definable political boundary having greater impact than a visual boundary. Finally the northwest border with Brookline is completed by Jamaica Pond and Olmstead Park.

While giving Jamaica Plain a sense of visual unity and as Kevin Lynch would say "legibility"<sup>11</sup> as a neighborhood, the open spaces and edge elements protect Jamaica Plain from adverse outside influences.<sup>12</sup> Simultaneously, they enhance Jamaica Plain as a desirable residential area and provide large amounts of recreational space for the neighborhood's residents.<sup>13</sup>

In addition to the dominant outer edge around Jamaica Plain, there are minor edge



Map # 3.13

Source: Boston Redevelopment Authority Map # D-36

elements that visually section Jamaica Plain into subareas. Because of the large size of Jamaica Plain, the outer edge is more obvious on a map than to the observer passing through or around the neighborhood. The interior edges are the ones which are most obvious to the pedestrian and driver moving through Jamaica Plain. These again quite clearly visually divide Jamaica Plain into subneighborhoods.

Among the most important interior edge elements are the New Haven railroad right of way and the vacant area surrounding it; the Centre St. and South St. shopping districts; and the heavily used Jamaicaway. These all divide the neighborhood lengthwise into slices. Because the east-west streets are narrower and curvey and not designed for through traffic, these are no clearly defined horizontal edges or paths except the northern section of Centre St. which cuts off the hospital and nursing home area from the more residential areas and also separates the Bromley Heath housing project from the Jamaica Plain neighborhood.

One may in addition, search for other visual indications of neighborhood boundaries. Among these more fine grained neighborhood distinctions are: a break between housing types, a difference in street foliage, and a range in maintenance standards. Locating these would require more time than is allowable for this study. As we noted earlier, besides personal evaluations of the physical environment a series of interviews may be administered to determine the residents' visual perception of their neighborhood.

#### Summary of Jamaica Plain as a Single Neighborhood

From our proxy measures of cohesiveness, Jamaica Plain does not qualify as a single

cohesive neighborhood. It also does not qualify as a single neighborhood under the second people-oriented definition, that of a homogeneous neighborhood. It was found to have variations along both socio-economic and ethnic lines. In addition, Jamaica Plain is neither a single structural or occupancy submarket. It has housing along the full continuum of values and rents as well as a split between sections that are predominantly owner-occupied and predominantly rental occupied. Jamaica Plain is, however, a single visual unit with definite natural boundaries. These are primarily parks and highways.

#### Summary of Jamaica Plain as an Aggregation of Subneighborhoods

As noted above, Jamaica Plain is only a single neighborhood in terms of visual boundaries or edges. We did find, however, that there are cohesive and homogeneous neighborhoods as well as both occupancy and structural submarkets and smaller visually defined neighborhoods within Jamaica Plain. Let us now see whether the smaller neighborhoods defined in each of these ways are unique to each specific definition or whether there is some agreement among the neighborhood boundaries based on different neighborhood elements.

A set of cohesive subneighborhoods was suggested by the community leaders. In many cases these areas were organized around a particular set of grievances or interests. These cohesive subneighborhoods may also be regarded as homogeneous subneighborhoods in that each may also be identified with a dominant ethnic and income group. These differ from the homogeneous subneighborhoods which were built out of aggregations of census tracts having a socio-economic index within the same class range. These differences can largely be explained by the difference between the boundaries dictated by census tracts

and the true boundaries of the cohesive subneighborhoods. The lack of homogeneity of population within tracts could also contribute to this discrepancy. For example, Tract 1207 in Jamaica Plain is a high socio-economic tract largely because it has a new luxury tower with over 300 residents. A large part of the tract is composed of lower income Spanish-speaking residents. According to the information provided by the community leaders, the luxury tower is in upper-middle income, Central Jamaica Plain and the Spanish population is in lower-middle income Hyde Square while both are in Tract 1207. This example provides further evidence to support the suspicion that the population within census tracts may no longer be homogeneous although the tracts were originally designed to have a homogeneous population. This first example also indicates that two different sources of data, first hand observations and the decennial census, when used to look at the same element of the neighborhood may still define spatially different areas.

Turning to housing submarkets, we found that on the basis of value and rent data at the census tract level, Jamaica Plain may be divided into three submarkets ranging from a low of "standard-marginal" housing to a high of "pleasantly good" housing (see Appendix A). These are the three middle range categories. The "pleasantly good" housing submarket matches the high socio-economic homogeneous subneighborhood and similarly for the other two submarkets as well. This shows a positive relationship between neighborhoods defined according to housing value and neighborhoods defined according to socio-economic status when using census tract data in both cases.

When we refer to the block level census data, the boundary lines of the housing submarkets change greatly, again illustrating the lack of homogeneity within census tracts

and the deceptiveness of census tract data for small area analysis. In the case of the block level data, there are a series of verticle strip-shaped subneighborhoods that straddle tract boundaries. Farthest east is a band of "standard comfortable" housing. Surrounding the Southwest Corridor (Penn Central Railroad right of way) is a band of "standard-marginal" and "substandard" housing which is again bounded on the west by "standard comfortable" housing. Following this is a band of "pleasantly good housing" which then flows into the "very good" housing of Moss Hill. There is also a verticle pattern apparent in the cohesive and homogeneous subneighborhoods.

There are only two ownership submarkets in Jamaica Plain. The area is instead predominantly rental-occupied. In this instance, there is again an agreement between Moss Hill and the owner-occupied submarket. Two areas in the Jamaica Pond section, the second wealthiest subneighborhood, also have large amounts of home-ownership. These areas of home-ownership correspond to "pleasantly good" and "very good" housing submarkets. The only other "very good" submarket outside of these is the site of the luxury towers. We have found then, that there is a strong relationship between high status housing and home-ownership in Jamaica Plain. Except in the case of luxury apartments, very little of Jamaica Plain's rental property is better than "standard-comfortable" on Richard Coleman's measuring rod.

As noted earlier, Jamaica Plain divides up visually into vertical strips because of the neighborhood's street pattern and land use distribution. The western most strip matches the cohesive subneighborhoods of Moss Hill and the Pond Neighborhood. These two areas west of Centre St. also represent a housing submarket which is further demarcated by the visual

boundaries of Centre St. and Jamaica Pond. The other cohesive subneighborhoods are largely influenced by the existence of the Southwest Corridor and Washington St. The strength of these visual boundaries as obstacles to mobility and social interaction may be diluted by the east-west orientation of the church parishes and the public school districts.

Washington St. and the Southwest Corridor also coincide with the boundaries of housing submarkets. The lowest quality submarket follows the Southwest Corridor going as far east as Washington St. and west to Chestnut St., a less dominant north-south street.

It is difficult to compare the Jamaica Plain subneighborhoods based on census tracts with the visually defined subneighborhoods because the tract boundaries do not adequately follow these major visual boundaries. Although the Census Tract Manuel does suggest using physical boundaries in setting tract boundaries, in the case of Jamaica Plain, the railroad right of way was used for tract boundaries but Centre St. was only used intermittently. Therefore, an aggregation of tracts would include areas outside of the visual boundaries.

We found then, at a smaller scale than the Jamaica Plain neighborhood itself, there are subneighborhoods that do meet the criteria of the various theories and in addition the boundaries of these subareas are roughly similar.

### 3.3 FINDINGS BASED ON JAMAICA PLAIN

#### Boundary Findings

Although our findings, based on both limited data and a single area are not conclusive, it appears that there is hierarchy of neighborhood boundaries which flow less from the defining element and more from the purpose the spatial entity is to serve. We found an



outer set of boundaries which: 1) were grossly defined by the physical environment, and 2) had historical significance. These are roughly the boundaries used by municipal agencies in their regulatory, planning and service delivery functions (See Appendix B for the ways in which the city has bounded Jamaica Plain) from this, we may see that governmental agencies do not take into account homogeneity in their subdivision of the city. Within Jamaica Plain itself there was a large amount of overlap among the boundaries for the smaller subneighborhoods defined according to all three elements, the people, the housing, and the environment. These smaller subneighborhoods have greater relevance than the historical neighborhood for decisions made by realtors, community workers, policy planners, and lenders because they contain people with a higher level of common interests and needs. Perhaps a finer grained investigation based on individuals' social networks, or the structural characteristics of housing would yield a set of still smaller neighborhoods. This scale neighborhood is of greatest concern to residents and perspective residents.

The neighborhood analyst then, has a choice of the scale neighborhood he may study. If he selects the historical neighborhood as his unit, he may not have an area with homogeneous people and housing. If his interest is in a homogeneous neighborhood, he is likely to also be looking at a geographic area with similarly priced housing, clearly defined physical boundaries (reinforced by the housing itself or other environmental elements), and people who at least recognize each other.

### Methodological Findings

Also shown to be critical in locating a neighborhood is the data base used in applying

each definition. In this study, the opinion of community leaders was used in locating cohesive neighborhoods. The data base was essentially the perceptions of these observers. The actual criteria used by them in establishing the boundaries of these cohesive neighborhoods was not made explicit. Each of these cohesive neighborhoods was also identified with a specific ethnic and income group. A series of personal interviews with the residents of the neighborhoods which groped for their pattern of social interaction may have yielded different information and spatial entities of a different scale.

The two definitions that were based on census tracts, the homogeneous neighborhood and the structural housing submarket based on housing value and rent level also yielded identical boundaries. But, when block level data was used for the structural submarkets, the resultant submarkets were quite different from those based on tract level data. In this case, the way in which the published data was tabulated and organized dictated the possible boundaries of the neighborhoods and the scale of the neighborhoods that could be studied. In addition, calculations using median tract data may homogenize the range of variation within the tract, giving a deceptive appearance of homogeneity.

The biggest methodological issues faced in the application of the definitions of a homogeneous neighborhood and a housing submarket were: first, the way in which the census is tabulated as discussed above; and second, the criteria for homogeneity to be selected. If the standard of comparing a tract to the city is used, the wrong category of a variable may be selected as dominant, as illustrated with Tract 1204. In addition, the number of break-downs of a variable influences whether a tract will be classified as absolutely homogeneous on any aspect of that variable. The more fine-grained the break down, the

less chance a tract will be considered homogeneous. Finally, little research has been conducted to ascertain what level of homogeneity is required for an area to be perceived as homogeneous. As noted earlier, the Census Tract Manuel suggests tracting homogeneous areas but gives no measure of homogeneity.

## Footnotes: Chapter 3

1. Langley Carleton Keyes, Jr. The Rehabilitation Planning Game (Cambridge, Mass.: The M.I.T. Press, 1969), p. 25.
2. William Sims and Richard Warthen, Neighborhoods: Columbus Neighborhood Definition Study (Columbus, Ohio: Department of Development, 1973). Richard P. Coleman and Bernice L. Neugarten, Social Status and the City (San Francisco: Jossey-Bass, Inc., 1971), p. 89.
3. See Wilfred G. Marston, "Socioeconomic Differentiation Within Negro Areas of American Cities," Social Forces, XLVIII, (December, 1969).
4. See Joel Arnoff, Nataniel Raymond, Arthur Wamuth, The Kennedy-Jefferson School District: A Report of a Neighborhood Study in Progress. (unpublished study, Harvard University, January, 1965)
5. Informants were: realtor, district planner, resident, manager of the Jamaica Plain Little City Hall.
6. Boston Globe, August 3, 1973, "Ways Sought to End Jamaica Plain Tension."
7. Interview with Mary Lou Brennan, Joint Center for Urban Studies of Massachusetts Institute of Technology and Harvard University, Spring, 1974.
8. Boston Globe, August 23, 1971, "Boston's Neighborhood's --4: Jamaica Plain's People and Their Problems."
9. The history and explanation of the Southwest Corridor may be found in Southwest Development Report. Summer 1974. According to this study:  
"In 1966, the Massachusetts Department of Public Works began to clear land for the Southwest Expressway (as proposed originally in 1948) paralleling the Penn Central right-of-way from I-95 in Canton through Hyde Park, Roslindale, Jamaica Plain...  
 Because of the impacts of these proposals on the city and its neighborhoods, Governor Francis W. Sargent declared a moratorium on new highway construction within Route 128... Previously, however, 100 acres along its route had been cleared in anticipation of its construction."
10. The Boston Phoenix, July 9, 1974, "Jamaica Plain: Neighborhood in the Red."

11. Kevin Lynch, The Image of the City (Cambridge: M.I.T. Press, 1960).
12. Boston Redevelopment Authority, Jamaica Plain General Neighborhood Renewal Plan (Boston: BRA, Project No. Mass R-49, June 24, 1965) p. 2-2.
13. Ibid.

## Part II: Neighborhood Change

### CHAPTER 4: HOW NEIGHBORHOOD CHANGE HAS BEEN DESCRIBED IN THE LITERATURE

#### 4.1 INTRODUCTORY COMMENTS ON NEIGHBORHOOD CHANGE

Thus far our discussion of neighborhoods has revolved around a static spatial entity composed of people, housing, and their surrounding environment. Our picture of a neighborhood is not yet complete. The elements that characterize a neighborhood and differentiate one neighborhood from another also change over time. New people move into a neighborhood and others move out to a different neighborhood. Houses age and deteriorate. Houses are also rehabilitated. Streets often give way under increased traffic, resulting in unsightly and dangerous potholes. Other times, streets are resurfaced. As Robert Yin wrote in his introductory comments about neighborhoods: "Neighborhoods are in a constant process of change; some improving others deteriorating."<sup>1</sup>

As in the case of defining a neighborhood, the literature contains many different descriptions of how neighborhoods change. In most cases a process which emphasizes one element of the neighborhood above the rest is discussed.

As there are many definitions of neighborhood and many theories of neighborhood change, there is also no consensus as to the sequence of causes of neighborhood change. Change is generally attributed to the larger economic, social, and political forces acting on the neighborhood through the pressures they exert on the city or the region. Although the cause of neighborhood change is not apparent from observations, the fact

that specific types of changes have occurred in a neighborhood may be detected by measuring the different indicators of neighborhood change at different points in time. In practice, this process of noting changes in various aspects of the neighborhood is often performed consciously or unconsciously by residents of the neighborhood, visitors, store owners, realtors, city officials and anyone else who has contact with the neighborhood. Each of these individuals may look at a different indicator or a different set of indicators in his own personal evaluation of the neighborhood. It is therefore important to know whether all the various indicators point in the same direction along the continuum of a declining to an improving neighborhood.

This is especially important in the area of public policy. If different planners or department administrators focus on different indicators of change and the indicators all point to the same direction of change, it is more likely that all the actors will work for the same ends, than if different indicators point to a different dynamic. Under the second circumstance, various actors may take measures that will work counter to their fellow workers' efforts. Also, if only one indicator is monitored, important trends may be overlooked. Various actors' perceptions of neighborhood change also affect the timing of interventions.

Not only must governmental actions be responsive to neighborhood changes, but they must also take into account the changes their actions may induce. For example, under a neighborhood-wide Urban Renewal program, the government may reduce the supply of low cost housing thus putting pressure on the housing supply in a different neighborhood.

The purpose of this second section is primarily to determine whether all the various indicators of neighborhood change do in fact point toward the same direction and rate of change or whether they provide conflicting findings. Secondly, we shall analyze the problems involved in conducting an analysis of neighborhood change. In this chapter, the literature on neighborhood change is reviewed. The three-part typology of people, housing, and the environment, established in the first chapter, will serve as the framework for discussing the various processes of neighborhood change. In Chapter 5, the indicators of neighborhood change which may serve as proxies for the process of neighborhood change are selected and discussed. Finally, in Chapter 6, several different indicators of change are applied to Jamaica Plain in order to determine whether or not the various indicators point in the same direction.

#### 4.2 CHANGES IN THE PEOPLE LIVING IN A NEIGHBORHOOD

The theories of neighborhood change which focus on the changes in the population of a neighborhood may be discussed in terms of two processes of change: 1) change in certain characteristics of the population or 2) mobility through which new people enter the neighborhood and old ones leave. The first has not received a large amount of attention in the literature on neighborhood transition, except to the extent that changes in the existing population render an area more vulnerable to the in-migration of a new group of people or cause people to be less satisfied with their present environment. The second process, mobility, has been treated in greater depth. Mobility may not



always result in a change in the type of population in a neighborhood. If each new household is similar to the one it replaces, we have mobility with stability in most demographic measures. If on the other hand, the new households differ from the previous ones by some characteristic, such as race or age, a change may have been introduced into the neighborhood.

We shall first look at theories of neighborhood change centering around changes in the population that induce mobility. We shall then look at theories focusing on population mobility itself. The critical aspects of the population which change in both cases are socio-economic status, race or nationality, culture or values, and age distribution.

The first type of population change, one in which changes in the residents themselves opens up their neighborhood to an influx of new and different people was expressed in a study conducted by Arthur D. Little, Inc. to help the city of East Cleveland understand and deal with the population changes that were occurring in their city.

By the late fifties, there were a number of indications that East Cleveland would soon experience a major transition. Its residents were aging, their children were leaving the community and were not being replaced by younger families.<sup>2</sup> (emphasis my own)

In addition to the change in the age structure just described, East Cleveland also experienced a change in the racial composition of its population. As the older white families left, they were replaced by younger working-class black families with children.<sup>3</sup>

Neighborhood change through mobility may in part be regarded as a function of a change in the people themselves which causes them to want to move. James W. Simmons explained the relationship between change in personal characteristics and mobility as

follows:

The decision to move is complex. It is concerned on the one hand, with the needs and values of the household, which change over time, and on the other, with the characteristics of the environment, which encompass home, neighborhood, and alternative locations... In order to overcome the time and money costs of moving, some attraction or dissatisfaction is required. The most obvious factor is social change that alters the relationship between a household and its environment. The size, age, or income of a household may change; the environment may be altered by such things as blight, invasion by other cultural groups, or increased land values. More likely, both the household and the environment change simultaneously, but at different rates.<sup>4</sup>

In his discussion of intraurban mobility, Simmons emphasized the relationship between a change in the people who move and a change in the environment at the origin of the move. David Meyer described this phenomenon as a change in the "place utility" of a household.<sup>5</sup> At the other end of the journey, at the destination neighborhood of the migrant, there may also be change, depending on whether the immigrants resemble those already living there.

Now, let us look at mobility in a more general sense. Peter Rossi undertook the pioneering study of residential mobility in hopes of gaining a better understanding of neighborhood change. He explained his interest in mobility as follows:

Basic research into residential mobility is of importance because mobility is one of the most important forces underlying changes in urban areas. Change in the urban residential neighborhood takes place through the ebb and flow of different populations. We need to know why residential shifts take place and how the characteristics of the neighborhood—its social composition, its location with regard to important urban activities, and its physical characteristics—tie into this phenomenon.<sup>6</sup> (emphasis my own)

In this study greatest emphasis was placed on people's motivations for moving. The critical finding was that mobility is most strongly influenced by changes in the family life cycle requiring an adaptation in the amount of space that a family occupies.<sup>7</sup>

Fifty percent of the U. S. population moves within a five year period.<sup>8</sup> Within this context, we can see that not all moves lead to a change in the population of an area. Rossi has shown that a need for a change in housing size to adjust to a change in household size is the primary reason for moving.<sup>9</sup> From this, Ozzie Edwards concluded that since housing characteristics are of primary importance to a household's choice of residence, even in a neighborhood undergoing racial change, similarity of housing needs would help maintain the stability in the other characteristics of the population in the neighborhood.<sup>10</sup> This was in essence what occurred in East Cleveland. The young black families replaced young white families after a period of mismatch between the housing and other older white population.

Duncan and Duncan also addressed this point in their detailed study of the black population in Chicago:

In all areas undergoing succession there is, by definition, a turnover of population. Yet it is conceivable that the population moving into an area may resemble the population moving out in its social and economic characteristics. The area, then, may be regarded as "stable" with respect to these characteristics, even though its racial composition changes.<sup>11</sup>

The authors attribute the stability in the non-racial parameters of the population to what they call the "situational" factor and the "site" factor. The first refers to the functional

position of a particular neighborhood in the city. For example, all people who place a high value on access to rapid transit would choose to live in a similar location. In reference to the second concept, the "site" factor, the authors feel that land use is relatively immutable over time and helps to maintain the character of the neighborhood even during periods of racial change.

Let us now look at those types of areas most likely to undergo changes in their population. The theory of ghetto expansion provides some insight into this issue. According to Richard L. Morrill:

Since the population of a Black ghetto is growing both from natural increase and from outside migration, severe pressure is being placed on the housing supply. For a while, increasing population can be accommodated through over-crowding but eventually the real estate market must accommodate the demand. In practice, the industry selects the edges along which extension will be permitted. At any one time, the most likely are those where the present residents have risen sufficiently in status to permit a shift to better and newer housing and where the proximity of the ghetto serves to encourage the move. Thus, areas of poor whites who cannot escape to better housing will not be chosen. Rather areas of older middle class housing may become available as the residents become able to afford small homes in the suburbs and flee the encroaching blacks.<sup>12</sup>

This shows that racial change is not an arbitrary process, but occurs in those areas which exert the least pressure to the change. The process of population change is also controlled in large part by the real estate market. As we noted earlier, the areas which are most open to new residents, are those where the existing residents themselves have changed in some way, allowing a move for them to be possible or even desirable. Those least likely to move away and most likely to block a change in the composition of the

population are those unable to make a move or those who are members of a very cohesive neighborhood marked by common religious or ethnic background which give them a solid footing in a particular location. Other obstructions to the spread of a ghetto into a white neighborhood are natural buffers like parks and highways.<sup>13</sup>

The Baltimore Urban Observatory labeled the process by which intermediate income groups are pressured out of an area as the "blow-out" theory. Like the lower income group in Morrill's scenerio, the high income group in the "blow-out" theory hold fast to their location. They can maintain the prestige of their neighborhood through political and economic power not open to middle income people.<sup>14</sup>

Racial change may also occur through a "self-fulfilling prophecy," that is, when people predict a neighborhood is going to change racially it often does. This expectation induces people to move out. Davis McEntire listed the conditions under which the prediction of racial change is most likely to be made:

When it is known that a minority group is in great need of housing, and when a neighborhood (1) is near an expanding area of minority concentration (2) contains housing priced within reach of a substantial part of the minority population or (3) possesses few advantages that would make it unusually attractive to whites, it is likely to be considered a good candidate for racial change.<sup>15</sup>

Here, people's attitudes influence mobility patterns. The attitudes are backed, however, by the realities of the housing market and the environment.

We have seen that low income white neighborhoods, cohesive neighborhoods, very

high income neighborhoods, and neighborhoods of homeowners are least likely to experience racial change. Now we shall look at who the migrants into an area are most likely to be. Both Ozzie Edwards and Harold Rose, in their studies of racial succession found that the most striking characteristic of both the black immigrants and the white outmigrants is their age composition.<sup>16</sup> White older couples leave very early in the succession process, leaving only those of least economic means. According to Edwards's study:

It appears that younger families lead the way in black residential succession. It is altogether likely that factors which grow out of the presence of younger children... forces young black families with children more than other black families to seek housing outside the black community...

Where the black younger families seem to lead the way in the movement into previously all-white areas, white younger families participate strongly in the out-migration from the areas.<sup>17</sup>

In addition, "the departure of whites from a transitional area is further stimulated when the incoming group is of lower socio-economic status than the older residents."<sup>18</sup>

The ramifications of population change are of primary importance in a neighborhood analysis. They are, however, very difficult to analyze. In their important study of the Negro population in Chicago, Taeuber and Taeuber expressed concern over this dilemma.

...analysis of concomitants of racial succession has indicated the virtual impossibility of separating neighborhood change due to racial transition from changes wrought by "normal" processes of social and residential mobility. What happens to a neighborhood seems to depend less upon changes in its racial composition than how it fits into the general pattern of residential differentiation.<sup>19</sup>

The emphasis of their study is on the effects of population changes on other aspects of the neighborhood, but they found it difficult to factor out the role of racial succession.

Racial succession is often regarded as "bad", especially by those who feel threatened by succession. Charles Abrams devoted a book, Forbidden Neighbors, to the origin and impact of fears regarding racial succession. He underlined the three most pressing fears of a homeowner facing racial transition as fear of losing his: (1) social status, (2) neighborhood associations, (3) investment.<sup>20</sup> The critical question is whether these fears are grounded in reality, whether they cause themselves to occur through the self-fulfilling prophecy, or whether they are false.<sup>21</sup>

The social area analysts, Bell and Shevky, were not as concerned with the process whereby population changes occurred but rather with the impact of the changes on their three indices: socio-economic status, urbanism, and ethnicity. Changes in these parameters were considered indicative of the direction in which a neighborhood was moving and gave each neighborhood a point of reference vis a vis other neighborhoods and a point of reference against itself at different points in time.<sup>22</sup> This mode of analysis is quite similar to the one to be pursued in the next two chapters of this study in which we shall discover whether the various indicators one may use to measure neighborhood change all point in the same direction.

#### 4.3 CHANGES IN THE HOUSING IN A NEIGHBORHOOD

Like the people living in a neighborhood, the second element, the housing in

the neighborhood also may serve as the focus for a study of neighborhood change. Unlike people, however, housing is stationary and remains in a fixed location, unless demolished. The location assigns a level of non-housing services to a housing unit, some of which are: quality of schools, crime level, and quality of city services. Housing is also a durable commodity bought and sold in a market economy. For these two reasons, the fixed location and durability of housing, a structure is usually occupied by several different households over the course of time. As any of the parameters of a housing unit change, the unit will appeal to a different type of demand. The process by which housing moves from one occupant to another is known as filtering.

A large amount of literature has accumulated describing neighborhood change in terms of changes in the housing stock of a neighborhood. Unlike population changes, housing changes have a magnitude and direction associated with them. For example, the value of the structure may increase or decrease. Similarly, the quality may improve or deteriorate. The only characteristic of the population that has a direction and magnitude is socio-economic status. Because housing may change according to each of its parameters and within each parameter by some amount and in a particular direction, changes in housing may more easily be studied in the context of a continuum from a declining housing submarket to a rising housing submarket.

We shall begin our review of the theories of neighborhood change with a discussion of the filtering process. This will be followed by a more detailed discussion of the occupancy and structural changes that may occur in a neighborhood.



## Filtering

William Grigsby described filtering as "the dynamic aspect of the housing market, the one aspect about which we know so little and must know so much if we are to have effective housing and urban renewal programs."<sup>23</sup> A large part of the difficulty in applying the concept of filtering, is a disagreement over the definition of the term. There is some ambiguity over the element of the neighborhood system to which filtering refers and beyond that, what parameters of the elements change in the filtering process.

To help clarify the concept of filtering, Grisby presented four different usages of the term. These are: (1) change in occupancy as a result of a change in price or rent level,<sup>24</sup> (2) change in the position of a dwelling unit in the value scale,<sup>25</sup> (3) absolute change in price or rent level,<sup>26</sup> and (4) improvement in housing conditions.<sup>27</sup> Each usage presents a different picture of the dynamics of neighborhood change.

There are those who feel that the private market will not build housing for low income people, so they are dependent on filtering or government subsidized low-income construction.<sup>28</sup> The Baltimore Urban Observatory found that the richest segment of society do not move in the short-run and that it is the middle-income groups who move to new housing and release units for filtering.<sup>29</sup> It is often believed that by the time housing has reached the lowest income people the quality has dropped below what is considered standard. John Lansing et. al. in their empirical study of filtering found that increasing the total supply of housing is beneficial to white, low income people for whom the housing market operates as a single market. Black households, however, were found to

participate in a separate market and an increase in the overall supply of housing does not reach their housing needs.<sup>30</sup>

Understanding the various interpretations of the dynamics of filtering is critical to understanding neighborhood change. The element of the neighborhood which is chosen for investigation affects the way in which a neighborhood is seen as changing. In the case of filtering one may look at changes in the income of residents, the value of housing (in absolute terms or relative terms) or the quality of housing. Each will describe a different process and point to a different form of policy intervention.

### Occupancy Changes

As noted above, population per se except change in socio-economic status may be regarded as a neutral occurrence. There are, however, those who feel that racial change produces changes in the housing stock. In particular, they fear declining property values, decreased maintenance, conversions of structures and more intensive use of structures. We shall now discuss the controversial issue of the relationship between racial changes and housing changes. Charles Abrams addressed himself to this question in the following way:

It is not the race, religion, or color of a group that affects value, but a complex of factors which differ in each case, with each locality, with each minority, with the numbers of the minority and the quality of their housing, and the economic and social status of the other groups within the community. These attitudes, moreover, depend upon the character of the particular minority as a social entity and its capacity for social assimilation within the community.<sup>31</sup>

Racial change and change in property value may not be related to each other in a simple causal sequence. There are broader issues and circumstances that must be understood before one may either label the causes of a change in property value or describe the impact of a change in population.

Luigi Laurenti undertook a study to establish the relationship between property value and race. His major statistical finding was that nonwhite entry into a previously all-white neighborhood was associated most often with price increases or stability rather than decreasing prices. He was unable to detect a uniform pattern of non-white influence on property values.<sup>32</sup> Laurenti described the two extreme cases of what may occur during racial change, the "glutted market" and the "short housing supply." In the first instance, whites fear the entry of non-white residents and many properties are put on the market at the same time. If the demand by other whites or non-whites is not sufficiently great, prices will drop. This may only happen when there are alternatives for the white population. The results of this panic selling may be regarded as a self-fulfilling prophecy. Many people chose to sell out of fear of a drop in property values. Their decision, in fact, brought about the results they were hoping to escape. A tight market would then tend to slow down racial succession and help to prevent price declines. In the case of the "short housing supply" whites are not anxious to move, but non-whites are anxious to buy, creating an upward pressure on prices. There is also a whole spectrum of intermediate conditions.<sup>33</sup>

Karl and Alma Taueber looked at the relationship between racial change and housing

quality. Their concern was that

...there is confusion arising from the fact that many Negroes live in deteriorating and blighted areas. Not considered is the fact that an area may have been deteriorating before Negro occupancy, and would be blighted whether occupied by whites or negroes. A second self-fulfilling prophecy also operates if white owners lower their expenses and standards of property maintenance when Negroes move in, making it inevitable that deterioration will be accelerated.<sup>34</sup>

There is, then, no clear causal relationship between racial change and a change in housing quality. The relationship works through other factors, of which attitude is of primary importance. As Laurenti noted:

...the incidence of blight may be due to nonracial causes, with the nonwhites merely being obliged, through poverty or social pressures, to live in the blighted areas.<sup>35</sup>

The link between racial change and housing change may be attributed to other characteristics of the immigrating households. As Stegman noted in his study of the inner-city housing market, racial change often implies younger, larger and sometimes poorer families.<sup>36</sup>

In his argument for "opening up the suburbs," to lower income people, Anthony Downs paid close attention to the common fear of falling property values.

In the long run, I believe, such "massive transition" of an entire neighborhood from middle-income households (whether white or black) to mainly low-income households (whether white or black) usually produces a decline in average property values, for there is much less income in the area after such a transition than before. If the poorer households try to make up for the lower incomes by doubling up occupancy, this raises maintenance costs or causes faster deterioration. Even if the poorer households spend higher fractions of their incomes on housing, they are unlikely to attain

the same spending levels as before. More important, the resale market for local housing also shifts from middle-income to lower income households, who cannot afford to pay as much.<sup>37</sup>

In Downs's view, property values may only remain stable if the people leaving an area are replaced by others of similar economic standing and if the neighborhood maintains its reputation so as to continue attracting the same type of people. The first point has its basis in the income elasticity of housing demand. Margaret Reid's study, Housing and Income, stressed the fact "...that values and rents of dwelling units tend to rise markedly with income or expected income of consumers."<sup>38</sup> In other words, the more money people have, the more they will spend on housing. This in turn is reflected in housing quality. We shall look at this and the attitudinal aspects of housing change in greater detail in our discussion of the relationship between maintenance practices and structural changes, to follow.

### Structural Changes

Over time houses age and if not properly maintained, they become obsolete and deteriorated. Intuitively, it is clear that a change in maintenance patterns results in a change in a structure's quality. In a competitive market, a drop in quality is tied to a drop in the market value of the structure. This in turn may lead to a shift to lower income people. As noted above, this may cause maintenance to be reduced further. There is some question as to the initial point of this cycle. We began here, with the investment decision. There are those who would begin with a change in population which sets off a decline in price

and then a decrease in maintenance and structural decay.

The economist Hugh O. Nourse described the relationship between the income of resident households and their maintenance investment:

With proper maintenance and improvements, the quality of any house could be maintained and it need not suffer economic obsolescence. Dwellings deteriorate because the income associated with the property declines. If the occupant is the owner, lower income means that less is available for maintenance and improvements. Declining property upkeep then is a rational adjustment to a decline in income associated with a particular property. Since property value is the discounted present value of earnings from property, its value will decline in response to lower occupant income.<sup>39</sup>

This ties maintenance decisions to the characteristics of the residents of an area. Maintenance investment may be treated as a purely economic decision. Maintenance is the most optional entry on a property owner's cash flow statement, so when the income yield of the property does not cover expenses this is the most rational point at which to cut back spending.<sup>40</sup>

Rolfe Goetze pointed out that the returns to an absentee owner are most sensitive to neighborhood effects than to his own maintenance.<sup>41</sup> Jerome Rothenberg described this phenomenon as the "prisoner's dilemma" in which it is most profitable for an owner not to maintain his building when all of his neighbors are not.<sup>42</sup> From this it follows "that isolated clusters of bad housing may lead to the deterioration of entire blocks or neighborhoods."<sup>43</sup>

There is one more condition under which maintenance is difficult, when the housing itself was built flimsily or at a standard below that of most other housing. Sam

Bass Warner attributed some of the deterioration in Boston's streetcar suburbs to shoddy construction.<sup>44</sup> Charles Abrams found a similar situation in more recent suburbs.

Ironically it is the suburban house itself which has invited social deterioration. It is small and rigidly planned, allowing for neither expansion nor contraction to fit changing needs...Most houses are flimsily built and no matter how much is spent on upkeep, shabbiness becomes apparent...As costs rose in recent years, the builders cut standards still further. The owners' maintenance costs went up still higher, generally beyond their ability to pay. This accelerates deterioration of the neighborhood and makes it an early candidate for a lower economic group.<sup>45</sup>

So far, property maintenance and changes in housing quality have been treated in accord with economic principles. There is also a subjective aspect to property maintenance, for it is the level of property maintenance that provides a residential area with its image to outsiders and to those searching for a place to live. Gruen and Gruen described maintenance as a "symbolic element" to suburbanites who rely on the standard of maintenance in their neighborhood as an indication of economic status.<sup>46</sup> To the extent that this is true, property maintenance may have some control over changes in the type of people who move into a neighborhood.

Roger Krohn documented a case in Montreal, in which maintenance decisions are not grounded in the market economy but rather in what may be called a "noneconomic" housing economy or a peasant economy, in which goodwill and exchange of services are the basis for most repair and maintenance work.

In this neighborhood economy, owners who regard their houses as their homes and who have neighborhood ties and loyalties invest enough in their buildings to attract

stable, working-class tenants. Reciprocities and cordial relations with these tenants reinforce the owners' inclination to maintain their building and to charge low rents.<sup>47</sup>

Here, neither economic rationality nor preservation of an image accounts for maintenance decisions. Instead, they are based on inter-personal relationships and loyalties. When this system breaks down and property owners are forced to rely on financial institutions and the money market, neighborhood decline often sets in.

#### 4.4 CHANGES IN THE NEIGHBORHOOD ENVIRONMENT

Changes in the neighborhood environment, although critical to people's housing and locational decisions, have not been studied in as great depth as changes in the first two neighborhood elements.

Unlike the other aspects of the neighborhood, the environment comes largely under the public domain. The quality of the environment and the way in which it changes can often be traced to the way in which the neighborhood is serviced by governmental agencies. The role of municipal services in neighborhood change has not yet received a large amount of attention in the literature, however. The environment is also influenced by both public and private investments in new facilities and maintenance.

The environment is part of the "bundle of services" we referred to in the discussion of housing. Besides the features of the structure itself, Kain and Quigley listed the following as the services one purchases at a particular location: accessibility to employment, a set of neighbors, and a collection of public and quasi-public services such as



schools, garbage collection and police protection. Through regression analysis, they found that, "The quality of a bundle of residential services has at least as much affect on the price of housing as such quantitative aspects as number of rooms, number of bathrooms, and lot size."<sup>48</sup> Changes in the quality of these services would have an impact on housing values, and therefore on who will move into the neighborhood.

In the Dayton, Ohio plan for dispersing low and moderate income people into suburban areas, the environmental context was chosen as an important leverage point in inducing the suburban residents to accept low and moderate income people into their neighborhoods. They assured the suburbanites of an increase in the level of services, such as, more frequent garbage collection, improved sanitation, and improved fire and police protection, without any increase in the property tax.<sup>49</sup>

Leo Grebler attributed some of the decline in the desirability of the Lower East Side of New York to its location and the obsolete character of the land use. Among the environmental factors contributing to the decline of the area were: lack of public transportation, changes in housing standards, and congested streets. In this case, the lack of change in the environment relative to the rest of the city contributed to its decline in attractiveness. The area had not kept up with the level of services in other areas and as a result could no longer attract residents.<sup>50</sup>

One of the most indepth studies of changes in the neighborhood environment was conducted by two British authors, Franklin Medhurst and J. Parry Lewis. They claimed:

Sometimes the emphasis is on the physical decay of buildings. At other times it is on the declining

attractiveness of the environment, the disappearance of activity, the growth of "undesirable" activities or even the quality of its administration.<sup>51</sup>

They pointed to "ill-organized" traffic as one catalyst to "environmental decay." In addition, the inadequacy of traffic facilities in older neighborhoods leads to further obsolescence of neighborhood commercial areas. They found that in areas with parking restrictions, empty stores tended to stay empty for long periods of time. This is a form of neighborhood decay. They concluded that

If there is one inference to be drawn from the chaos of our towns it is that their land use structure is now, in many cases out of moded. They suffer from a functional obsolescence, for their design no longer allows them efficiently to fulfill their function.<sup>52</sup>

A decision to introduce a different land use into a neighborhood may also contribute to neighborhood change. The construction of a highway may change the locational desirability of a neighborhood by bringing it within commuting distance of employment centers. In addition other capital improvements such as a new school or playground have positive influences on the neighborhood as a whole. (See Appendix C for a discussion of the effects of other types of governmental intervention).

#### 4.5 NEIGHBORHOODS AS PART OF A SYSTEM

We have seen many of the ways in which each individual neighborhood may change over time. The scholars of neighborhood dynamics discussed thus far have focused

primarily on the components of change internal to the neighborhood itself. There is another school of thought that claims that each neighborhood is part of a larger system and that the changes that occur in each individual neighborhood are governed by economic, political, social and psychological forces acting on the system as a whole. Most of the system-oriented theories have their basis in theories about urban growth and development.

Ernest W. Burgess's "Concentric Zone Theory" was among the earliest of the system-oriented theories.<sup>53</sup> According to Burgess, the city is composed of five circular zones each containing a different class of people and set of activities. Changes occur through the migration of people from one zone into the next. Homer Hoyt is the architect of the "Sector Theory" another widely accepted theory of neighborhood change.<sup>54</sup> According to this theory, as the city grows, the fashionable districts move outward radially from the center of the city along transportation routes or towards an existing nucleus of buildings or trade. As this growth occurs, inner areas filter down to lower income people. Whereas Burgess emphasized population mobility, Hoyt emphasized the filtering of housing units in his model.

Walter Firey criticized these theories as being "idealized descriptive schemes."<sup>55</sup> He instead put primary emphasis on cultural values as the key to understanding patterns of neighborhood change. Edgar M. Hoover and Raymond Vernon also proposed a theory in reaction to the earlier accepted ones. They claimed that people and residential development do not move outward from one zone to the next but, rather, "leap frog" to sites that suit the current or projected demand for housing.<sup>56</sup> They proposed instead

a five stage theory of urban development. The movement of a neighborhood through these stages is largely dependent on regional changes.

These theories of neighborhood change and urban development are important because they place the neighborhood in its larger context of an urban area. While focusing on the neighborhood elements, particularly people and housing as the components of the neighborhood that change, they include a description of the way in which neighborhoods interact with each other and the importance of the larger economic, political, social, and psychological climate in the development and change of neighborhoods.

A period of rising incomes would in Burgess's theory cause people to move to the next wider circle and cause increased construction in the Commuter Zone. It would push Hoyt's sectors further out and increase the speed of movement through each of Hoover and Vernon's successive stages. During the course of population shifts and housing construction, the neighborhoods which make up each zone or sector are changing in response to a situation which is exogeneous to the neighborhoods. Similar characterizations may be drawn for other wide-scale changes such as a new transportation technology, changes in school zoning, and careful surveillance of fair housing practices.

According to these system-oriented theories, one cannot understand the dynamics of neighborhood change by studying a particular neighborhood. One must instead understand its role in the city and the forces which are acting on the neighborhood and on all the surrounding neighborhoods as well.

Large amounts of data are required to document the forces acting on each neighbor-

hood and the role of each neighborhood in the urban system. For example, knowledge of interest rates, governmental interventions, and changes in employment locations are required for such an analysis of neighborhood change. Currently, computer models are being developed to simulate this change process.<sup>57</sup> Although this is a critical aspect of neighborhood research, it is beyond the scope of the current analysis. We shall instead analyze those indicators that reveal what changes have occurred. These in turn may serve as clues to larger regional changes.

#### 4.6 CONCLUSION

The question of how neighborhoods change has been studied for a half century, yet there is no consensus as to how or why neighborhoods change. Although most of the theories presented are not area-specific, some of the ambiguity may be that each neighborhood changes in a unique manner and therefore each observer will find a different dynamic. Alternatively, the difference in the perspective of each author may account for the variety in the interpretations of neighborhood change.

Our concern in this study is to determine whether the indicators of neighborhood change that may be used to monitor each of the processes described in this chapter move in the same direction, at the same rate, and in a particular sequence. In the next chapter we shall develop a methodology for measuring and analyzing each of the indicators of neighborhood change. In the following chapter, we shall apply several indicators of neighborhood change to subneighborhoods in Jamaica Plain. We shall then

look at the changes that have occurred in the population, the housing, and the environment as revealed by the selected indicators and compare the results provided by each indicator to see whether the focal point of the research does in fact make a difference in the direction a neighborhood is perceived as moving. We shall also note the data limitations and methodological difficulties encountered in this investigation.

## Footnotes: Chapter 4

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### Chapter 5: Measures of Neighborhood Change

In the previous chapter, we presented a wide range of theories explaining the process of neighborhood change. Each of the processes of change described rested primarily on a specific element of the neighborhood, either the population, the housing, or the environment. Mobility and the resultant population turnover are among the most commonly observed processes of neighborhood change. Housing construction and filtering are a second set of important processes. Third, capital investments, such as highways, schools, and playgrounds are still other major sources of neighborhood change.

Each of these processes is very difficult to monitor. There is no single source of data on population mobility nor on the characteristics of the movers. Nor is there any data on their places of origin and destination or on the characteristics of the population of these two areas respectively. This is the type of information that is necessary for one to determine what sets of moves are associated with neighborhood change and which are instead just shifts in similar types of people. Similarly, the amount and geographic extent of deterioration in a city's housing stock is very difficult to monitor, yet this is a critical aspect of neighborhood change. Housing deterioration is also generally associated with unsafe living conditions, housing abandonment, and a change in the composition of the population. Finally, the location of capital investments may be gleaned from the annual reports of various municipal agencies, but this does not tell the analyst the number of people relocated in a highway construction project nor the impact of the highway on the surrounding neighborhood. In an analysis of neighborhood change,

knowledge of the location of the investment is only useful if the impact of the project is also understood.

Because all of these processes are so difficult to monitor, the neighborhood analyst is often forced to analyze the indicators of neighborhood change as proxies for the process itself. Each of these indicators is a characteristic of the neighborhood which may be measured at different points in time. Their changes may be calculated and analyzed using easily available data. Because most neighborhood analysts have neither the time nor the resources to gather the large amount of data required to study the actual process, it is important to have a clear understanding of the information provided by the various indicators. In this chapter, we shall explore the importance of several of the indicators of neighborhood change, in particular, those indicators which provide information on changes in a neighborhood's population, housing, and environment. We shall discuss how each reflects the changes occurring in a neighborhood and how each may be measured and monitored. Because so many people consciously or unconsciously rely on indicators in their evaluation of a neighborhood, it is important to determine whether the various indicators point to the same process, that is whether they move in the same direction, at the same rate and in a standard sequence. The application of various indicators to Jamaica Plain in the next chapter will shed some light on this issue.

An analysis of the indicators of neighborhood change does not provide information on the cause of change, rather it surfaces the types of changes occurring in a neighborhood and provides information on the direction and rate of change. The indicators also

provide a clue to the potential occurrence of other changes which may then be checked using other indicators. If in application, the various indicators of neighborhood change do not point in the same direction as commonly believed, one must be especially careful in drawing inferences on other changes based on the knowledge of the behavior of a single indicator or some small set of indicators.

In addition to selecting a set of indicators to monitor, one must have a standard by which to evaluate how much change in the indicator actually constitutes neighborhood change. For example, if the median income of a neighborhood has dropped by five percent, has the neighborhood changed or must the income level drop by 25 percent to actually be considered an aspect of neighborhood change? Although this is a crucial question, it is also a very difficult one that has not been adequately covered in the literature on neighborhood change. In those instances where we have supporting information, we shall discuss the question of a threshold for change. In the case of those indicators for which a threshold level has not yet been ascertained, we shall assume a particular standard, for illustrative purposes.

Let us now discuss several of the indicators associated with the processes by which the three critical neighborhood elements change.

### 5.1 POPULATION CHANGES: MOBILITY

As noted above and in the previous chapter, people are the primary element in those theories of neighborhood change which focus on the mobility process. Mobility

is constantly occurring. A large amount of population turnover, however, does not lead to neighborhood change. When it does, those aspects of the population most likely to change are: socio-economic status, race, culture and values, or age distribution. These may then serve as indicators of neighborhood change.

The changes in turn may occur in response to other neighborhood changes such as new employment possibilities or a change in the housing stock. Changes in the population composition are also important in that they may induce certain adaptations on the part of the other aspects of the neighborhood, such as changes in the curriculum of the neighborhood school or changes in the merchandise offered in local stores.

The socio-economic status of the residents of a neighborhood contributes largely to the reputation of that neighborhood and influences who future residents will be. The most common trend is for people to be replaced by people of a similar or of a slightly lower status. David Birch hypothesized that the new residents who are reaching up to a better neighborhood are simultaneously pulling down their new neighborhood to a lower level with their arrival.<sup>1</sup> The neighborhood will in turn continue to attract lower status residents. For the original residents, the neighborhood has declined. The new residents on the other hand have experienced upward mobility.

Many cities have a few isolated examples of neighborhoods that have undergone quite dramatic increases in the socio-economic status of their residents. These are the areas that are "rediscovered" by artists or young professionals or have been the site of extensive Urban Renewal. Among the most important examples are: Georgetown

in Washington, D.C., Society Hill in Philadelphia, and the South End in Boston. In each case, the "rediscovered" area is interspersed with poorer people and is bordered by areas of much lower socio-economic status.

Different aspects of the socio-economic index (SEI) and different sorts of changes in it interest different neighborhood analysts. Social welfare organizations monitor changes in the lower strata of the population to determine those areas needing greatest assistance or to determine whether the remedial programs they provided have helped to improve the socio-economic status of the area's residents and thus induced neighborhood improvements. Bankers may analyze the geographic distribution of changes in income, in their decisions as to where to place a branch bank.

A change in the SEI is, however, indicative of more than just a change in the index's component variables. It means that the area is appealing to a different class of residents, perhaps because of a change in the locus of specific types of employment opportunities or changes in the housing market. A change from an upper income, highly educated, professional population to a middle income, high school educated blue-collar population carries with it also, a change in the neighborhood's social institutions, a change in the children's attitude toward school and education, and a change in the types of merchandise local stores should stock.

All three variables in the socio-economic index (SEI) are provided in the tract level decennial census. This forces the analyst to work within the arbitrarily defined groupings of people associated with a particular census tract. In addition, the analyst is also



limited to a ten year period within which to monitor changes. A change in the magnitude of the socio-economic index indicates a change in the socio-economic status of that tract (or neighborhood) as compared to the base city. Because the index is composed of three different elements, each measured on different scales, it is not clear how large a change in the index would be considered significant. Any change at all, however, indicates that the census tract is changing at a different rate than the base city. For our analysis, this will be the standard for neighborhood change.

For those most concerned with changes in the number of people living in poverty, an important source of data is the number of people who rely on public assistance as their sole source of income. This information is currently available in the 1970 tract level census and will probably appear in all future decennial enumerations to allow a comparison of changes over time. Although individual cases are kept confidential, aggregate statistics on welfare recipients in a particular area may possibly be obtained from the state. This would allow the analyst to choose the geographic district most useful for his analysis and also allow him to select the time frame he wishes for his analysis.

The second most important population-related indicator of neighborhood change is racial change. The measure commonly used in analyses of racial change is the change in the proportion of minority residents. Commonly, an increase in the proportion of minority residents is associated with neighborhood decline in that minorities hold an unfavorable social position in our society. White residents often fear the immigration of minority groups. This prejudicial reaction causes the neighborhood to decline in its

appeal to white residents as the proportion of non-white residents increases. This is the underlying explanation of the "tipping-point" phenomenon. That is, when the non-white population reaches a particular proportion of the population, the area will inevitably become entirely minority inhabited.<sup>2</sup> Some scholars have refuted this theory, but the majority support it. Myerson and Banfield claimed that the critical "tipping-point" is thirty-three percent minority inhabited.<sup>3</sup>

The decennial census, again, is the most useful source of data on racial change. Enumerations have been published at both the block and the tract levels. The most important population groups in the Boston area who can be studied using census data are: white, negro, Spanish-speaking, and foreign stock. Using block level data, one may in addition to analyzing changes in the proportion of white, and black residents, analyze the geographic distribution of concentrations of minority people over time. A standard of homogeneity may be selected such as 51 percent or a measure relative to the base city, as suggested in Part I. One may then plot the change in the size of the homogeneous neighborhood as defined by that particular ethnic group. This provides data on the degree of succession occurring and data on the characteristics of an area just prior to racial change. As an alternative to the "tipping-point" theory, racial change may be regarded as significant when the proportion of change exceeds the proportion of change for the base city.

The culture or values of the residents of a neighborhood are another indicator that may be monitored in an analysis of neighborhood change. Changes in this dimension of the neighborhood are most important when one is studying a cohesive neighborhood where

residents with a dissident value orientation would be disruptive to the established way of life in that neighborhood. Among the aspects of culture that are most important are: child rearing practices, attitudes towards the home, and public behavior.

Again the values of the residents of a neighborhood contribute to that neighborhood's reputation and attractiveness. A divergence from the middle-class norm is often considered a negative influence on the neighborhood. Culture is often closely tied to socio-economic status and ethnic background. Certain special neighborhoods like the Italian North End in Boston and New York's Chinatown have a unique and often romanticized culture. In these special cases, the acculturation and Americanization of the second and third generations or the in-migration of non-Italian or non-Chinese residents respectively are considered aspects of neighborhood decline.

Culture is a difficult variable to analyze in an "arm's length" investigation. It instead requires such intensive first-hand techniques as interviewing and participant observation. When one is searching for cultural changes, the intensive investigation must continue over a considerable period of time.

The final characteristic of the population to be discussed in terms of its role as an indicator of neighborhood change is the age distribution of the population. This is a critical factor when one is looking at mobility patterns. As Rossi discovered, the primary purpose for a move is to adjust housing size to family size.<sup>4</sup> Family size is in turn closely related to the ages of the family members. This indicator is also important for decisions on neighborhood facilities. An increase in the number of young households points towards

a need for increased educational and recreational facilities. Elderly people require a different set of neighborhood institutions such as visiting nurses and meeting rooms.

As in the case of racial change, a change in the age distribution of a neighborhood's population may not objectively be used to label the direction of neighborhood change. However, as noted in the previous chapter, a change in the age distribution of the population is an important indicator of other concurrent trends which may in turn be related to neighborhood decline or improvement. The aging of a neighborhood's population which over time may result in a predominantly elderly population is generally also associated with a reduction in the income of neighborhood residents. Knowledge of the fact that the income reduction in a neighborhood is largely attributed to the aging of the population rather than the immigration of poor people has important implications for the outcome of the neighborhood analysis and the decisions which are based upon it.

In the case of homeowners, aging may result in decreased housing maintenance.<sup>5</sup> An influx of families with large numbers of children may also potentially be an indication of neighborhood decline in that children may be destructive to the housing stock. Large families also often have little discretionary income left for maintenance after the fixed expenses of each household member are met. Large numbers of college students, even though they often inflate rentals, an indication of neighborhood improvement, may also cause greater noise or property abuse, indicators of neighborhood decline. On the other hand, middle-aged couples with no children ("empty nesters") are often positive additions to a neighborhood because they add a mark of stability and respectability. Age infor-

mation must be combined with income or socio-economic status information to give a true picture of the dynamics which are occurring in a given neighborhood.

The character of a neighborhood changes with a change in the age distribution. An area which has over time become predominantly elderly has a very different atmosphere from the atmosphere it may have had during a period in which it had predominantly middle-aged couples or young families. In addition, as noted above, the neighborhood facilities must also change to adapt to the changing population needs. Grocery stores may need to provide delivery service. Day care centers may become less important than meeting rooms or card rooms.

As in the case of changes in socio-economic status, the primary source of data on changes in the age distribution of a neighborhood's population is the decennial tract level census. A comparison of the changes in each tract's age distribution over a ten year period with the changes for the city as a whole will provide information on the relative importance of the trends observed in that tract.

A related factor to age distribution is the incidence of female-headed households. An increase in female-headed households is a common indicator of familial instability and neighborhood decline. This data again is available in the 1970 tract level census and will probably be available in future enumerations to allow a study of change in this indicator over time.

Although each of these proxies for the mobility process are measures of changes in the characteristics of the residents of a neighborhood, the information they provide, may

serve as clues to other changes that are also occurring in the neighborhood.

## 5.2 HOUSING CHANGES: FILTERING

Filtering is the principal process of neighborhood change which hinges on the area's housing stock. Filtering is the process by which housing units change owners or occupants. As noted in the previous chapter, many different aspects of the neighborhood change in the filtering process: the people may become poorer; the housing may decline in absolute value, or decline in value relative to the rest of the city; the housing may deteriorate; or some combination of these may occur. The filtering process is generally initiated through the addition of new units to the housing stock. New construction, itself may also introduce changes into a neighborhood. New construction may change a vacant tract of land into an inhabited area or new construction may replace older deteriorated housing, thus introducing a different type of structure into a neighborhood.

Changes in the characteristics of a neighborhood's housing are most commonly monitored by realtors, investors, bankers, and residents. The type of housing in a neighborhood may serve as a clue to the type of people living in the area, as well as a clue to the other non-housing neighborhood services.

As in the case of population changes, the characteristics of housing that differentiate one neighborhood from another are also the indicators of neighborhood change. Most important among the indicators are changes in quality, price or rent level, tenure, and intensity of use of the neighborhood's housing. Each of these indicators may be measured

to determine where a neighborhood is on the continuum of a declining to an improving neighborhood.

One of the most important indicators of neighborhood change is housing quality. A change in quality may be a result of new construction, rehabilitation, or deterioration. It is largely the quality of a neighborhood's housing that determine's a passerby's impression of a neighborhood. Over time, the appearance of the neighborhood's housing is a clue to the observer of what is happening in that neighborhood.

The quality of a structure is dependent on both the quality of the initial construction and the level of maintenance. Under normal circumstances, if not maintained, all structures will deteriorate. Some structures, however, will deteriorate more rapidly than others, just on the basis of construction quality. On the other hand, given similarly constructed houses, investment in maintenance is the primary deciding factor in housing quality. As maintenance is deferred, the cost of bringing a unit up to standard condition becomes increasingly more expensive.<sup>6</sup>

Because repairs and maintenance often require large amounts of capital, the decision to invest in maintenance must be weighed against other forms of investment. Among the factors that enter into such an investment decision are: potential return on a rehabilitation or maintenance investment, expectations concerning surrounding properties, and commitment to the neighborhood. As noted in the previous chapter, resident owners are more likely to invest in maintenance than absentee owners in an otherwise declining area. They are more concerned with their own home and preserving their own investment

and are less motivated by the larger market forces that may undermine their individual investment than are absentee-owners. Maintenance decisions alone may be analyzed to help determine people's expectations of their neighborhood. Reduced maintenance would point to a pessimistic evaluation of the neighborhood's future on the part of owners. If they are unsure of their ability to bring in an adequate return on their investment, investors will find major repairs economically unfeasible, and curtail maintenance.

An upward transitional neighborhood is one in which the quality of the housing is improving as a result of either public or private initiative. A rehabilitation or code enforcement program may result in property improvement. Some neighborhoods have undergone private sector upgrading in which residents have independently chosen to upgrade or rehabilitate their homes without governmental impetus.

There are many stable neighborhoods in which there is no discernable change in property quality. In these areas a steady level of property maintenance is followed. The exact quality level may differ from one stable neighborhood to another. For example, an area of luxury apartments may remain stable at a high quality level while a less luxurious rental neighborhood or a public housing project may remain stable but at a lower quality level. In addition, although quality may remain stable, the relative appeal of a particular structure may change over time as building standards and tastes change. This is a different sort of quality decline, one which is based on the link between people and housing submarkets. This type of change does, however, have an influence on the direction a neighborhood would be perceived as moving.



Housing quality is very difficult to measure and monitor. Until 1970, there was a three level quality classification in the decennial census. The exact definitions of each level changed from census to census, causing comparisons to be questionable. In addition, the criteria for rating a structure were applied subjectively by various enumerators causing inconsistencies within the data for a single enumeration period. A measurement of housing quality was finally excluded from the 1970 census. There have been several methods suggested for approximating housing quality on the basis of the data supplied in the 1970 census. These in turn may be used for comparisons over time.<sup>7</sup> Among those proxy measures available in the census are: age of structure, the existence of plumbing, heating, and kitchen facilities and the existence of direct access to the unit. Comparisons of plumbing over ten year intervals are still impossible using the published census because in 1960 a measure of plumbing was tied to a measure of housing quality. Because of sample changes from census to census, data on age of structure is also difficult to compare. It does, however, provide information on the amount of new construction. In most inner city areas, however, a large amount of the construction is undertaken using housing subsidy programs, thus adding further ambiguity to the information provided by this indicator. When the construction is not in response to market forces, it does not provide an accurate picture of the housing market.

There are other sources of quality data. Some cities have conducted surveys to monitor the level of code violations.<sup>8</sup> If follow-up surveys are conducted at regular intervals, this may be used as an indicator of neighborhood change. The Boston Redevelopment

Authority (BRA) used a windshield survey conducted by the Housing Inspection Department (HID) to classify the neighborhoods of Boston according to the cost of bringing the housing stock up to standard quality. This housing quality information was used as the basis for policy suggestions.<sup>9</sup> Again, if a follow-up survey were to be conducted, one would be in a position to label each neighborhood as declining, stable, or improving on the basis of a dollar scale which reflects the change in the cost of bringing the units up to standard. Although there is a major subjective element involved in such an undertaking, it does provide a usable measure of neighborhood change, especially for governmental officials interested in how to best use resources for housing. They may invest a small amount of money in reasonably good quality housing and rehabilitate a large number of units or put a major investment into the worst units. Those units declining most slowly may be regarded as the safest investments. On the other hand, those units declining most rapidly may have the greatest need for public intervention.

Finally, the analyst may conduct a field investigation himself over a period of several years using an explicit check list to monitor the quality level of structures. He may, alternatively, rely on the more subjective evaluation of residents by conducting interviews with a sample of residents and owners to learn about their maintenance policies as well as changes they have observed in the quality of housing in their neighborhood over various time intervals.

Housing values and rent levels are another set of commonly used indicators of neighborhood change. It is often believed that housing value and rentals are highly

correlated with many other indicators of neighborhood change. Therefore, they are often used as a concrete source of evidence that neighborhood change has occurred.

Housing values are dependent both on the characteristics of the structure itself: its size, quality, and layout, as well as the characteristics of the neighborhood: the type of people, quality of the schools and quality of the city services, location and access to work and shopping. Therefore, a change in housing value may reflect a change in many other variables as well. A rise in value, an indication of an upward transitional neighborhood may have its roots in a new transit line into town, raising the demand for housing in a particular neighborhood.

A decline in a neighborhood's housing value represents a decrease in the demand for housing in that neighborhood or a relative increase in the price of supplying housing services. As in the case of upward transitional neighborhoods, the causes of declining demand are varied, but generally reflected in value. Rent levels operate similarly.

The above scenerio is most descriptive of a perfect market in which all people bid for housing equally on the basis of their respective economic capabilities. In practice, there are some imperfections in the housing market. Certain areas are "red-lined" by financial institutions, thus precluding people from purchasing homes. This in turn reduces property values. Certain types of residents are charged more than a fair market rent because of either discrimination in the housing market or inadequate information on housing options. Large families or welfare families who may potentially cause more wear and tear on the structure or who are poor credit risks may be charged a greater rent than

the free market would allow. Other neighborhood characteristics such as high crime rates, high insurance rates, or high fire rates may also provide owners with a need to charge higher rents. An area which has an increasing number of students will have a rising rent level because of the ability of students to pay more for a unit than a family with a single source of income.

As noted previously, in the discussion of the literature on housing changes, housing values may vary with a change in the racial composition of population and the number of housing options open to both white and non-white residents. In addition, outside institutions like realtors and lenders may use discriminatory practices which in turn alter the market value of a structure. It follows then, that changes in housing value or rent may not always be positively correlated with changes in the socio-economic status of the residents or the quality of the housing.

Once again, the block level and tract level decennial census provide data on both housing values and rent levels. The value figures are based on "the respondent's estimate of how much the property (house and lot) would sell for if it were for sale."<sup>10</sup> It is not certain whether most people have a realistic idea of what their house is worth on the market. Some may use their purchase price which may be too high in a declining neighborhood and too low in an upward transitional neighborhood, thus blurring the true trends. When a comparison is made over several census periods, an inflation factor must be applied to all figures to make them comparable over time.

An alternative method for studying value trends is to catalogue all the property

sales in a neighborhood over a specific time period and compare sale prices at both ends of the period. As noted in the second chapter, this data is available from many sources. In the Boston area, the easiest to use is Banker and Tradesman, a weekly publication. Because only a small fraction of houses are sold in a given year and not all houses in a neighborhood are exactly comparable, this method of analysis may be inexact.

Local realtors and housing managers are important alternative sources of information on rental trends in a given neighborhood.

Changes in tenure are also important indicators of neighborhood change. Some structures are constructed explicitly for rental occupancy. There are, however, cases in which a single-family house switches from being owner-occupied to being rental-occupied or the other way around. In addition, the units in a structure may, over time, be subdivided to accommodate more households or be merged to house fewer households. A switch from owner-occupancy to renter-occupancy often occurs when mortgages are difficult to acquire. Investors buy the structures with cash or are able to obtain credit on the basis of their large number of other holdings. Several studies have documented the importance of owner-residence in maintaining a structure. Non-owners have no investment to protect. The presence of the owner of a multi-unit structure is better than "arms length" management in that it allows better supervision of the property and helps decrease owner-tenant frictions.<sup>11</sup>

The scenario of disinvestment and investor ownership is most common in older inner city areas and generally indicates neighborhood decline. Tenure changes do not always

move in the direction of resident owner to rental occupancy. In the "rediscovered" areas there is often a switch from rental-occupancy to owner-occupancy. This is a case of neighborhood improvement.

Data on tenure is available at both the block level and the tract level in the decennial census. As was true with the previous indicators, one may look at changes in the proportion of owner-occupied structures to determine the trend occurring in a neighborhood. From the census, however, one may not determine the number of units that changed tenure, the number of units converted to single family occupancy, nor the number of subdivided units.

The final aspect of housing that should be monitored in a study of neighborhood change is the intensity of use of the housing stock. Households with greater than one person per room are commonly considered to be experiencing a form of housing deprivation, overcrowding. An increase in the number of overcrowded units (an increase in the number of units with more than one person per room) is associated with neighborhood decline for several reasons. First, most households that live in overcrowded conditions are forced to live there because they are too poor to live in adequate dwelling units. Second, the greater the intensity of use of a unit or structure, the more stress that is put on the structure and the more difficult it is to maintain the quality of the housing unit. Third, the greater the population density in a neighborhood, the higher the likelihood of epidemics and the spread of contagious diseases. Again an increase in the incidence of certain diseases is indicative of neighborhood decline. One common way in which overcrowding is encouraged is through conversions of previously large units to smaller units.

The major source of data on changes in the level of overcrowding is the block level and tract level decennial census. Neighborhood decline occurs when the percent of households with greater than one person per room increases at a rate faster than the city as a whole and vice versa for an upward transitional neighborhood. One may also monitor the number of building permits granted in a neighborhood for conversions. The greater the number of conversions, the higher the likelihood of a change in the amount of overcrowding.

Housing is the neighborhood element most often used as the point of public intervention in the neighborhood. Some of the forms of public intervention that have an influence on housing are: code enforcement, rent control, Urban Renewal, highway construction, and property tax policy. (For a discussion of the relationship between each of these forms of intervention and neighborhood change, see Appendix C). These programs are not all directed at the same aspect of housing. If the different indicators of neighborhood change do provide divergent information, it is important in the development of such neighborhood-based programs to understand the behavior of all the different indicators of neighborhood change, not just the one directly related to the aspect of the housing that is being manipulated.

### 5.3 ENVIRONMENTAL CHANGES: MUNICIPAL AND PRIVATE INVESTMENT

The neighborhood environment is the broadest of the neighborhood elements and the

one providing the most obvious clue to living conditions in a neighborhood. Trash strewn streets and abandoned warehouses are associated with poverty. Large green lawns and newly paved streets point to affluence and comfort. The changes in these aspects of the neighborhood, however, are more difficult to report on than changes in the other aspects of the neighborhood. The data required for monitoring the various aspects of the environment is not codified in any data series. For example, one may not easily determine whether the amount of trash on the streets has increased or decreased over a five or ten year period on the basis of reported data.

As noted in the previous chapter, those processes most influential in changing a neighborhood's environmental features are the level and form of municipal and private investment. Municipal investments may take the form of city services such as garbage collection, police protection and schools; or capital improvements such as highway construction or a new gymnasium. Private investments come into play in changes in land use decisions such as the construction of an industrial park or shopping center in a previously residential neighborhood or less dramatically in the form of changes in the type of commercial facilities in a neighborhood. Both of these processes are important primarily in their impact on neighborhood appearance and in their contribution to the relative desirability of the neighborhood for various groups. Let us now look more closely at these processes and the proxies available for measuring them.

In terms of neighborhood appearance, the most important services are refuse collection, street cleaning and street repair. A decline in neighborhood safety and comfort may be



associated with inadequate fire and police service. Along with appearance and safety, perspective residents are most concerned with the quality of schools and recreational facilities. A common reason for a move to the suburbs is for better schools and more play space for children. Upgrading these aspects of an inner-city neighborhood could potentially help the neighborhood hold on to its residents or attract new higher income residents.

It is very difficult to objectively measure changes in the level of these city services. The most commonly suggested proxy is a change in the per capita expenditure by a municipal agency in a particular neighborhood. This is an imperfect measure in that changes in technology or economies of scale may allow the per capita expenditure to drop or remain the same over time, while the quality of the service provided is improving. In addition, expenditure figures for the city are rarely broken down by service district or neighborhood to allow a comparison of per capita expenditures over time. When they are, it is still difficult to determine both the impact of expenditure changes on the neighborhood and the reason for expenditure changes. Perhaps expenditures may rise because of an increase in the cost of labor or supplies. This may not be translated into improvement in the neighborhood's quality.

Crime rates, over the course of several years and by neighborhood are available from the police department upon special request. An increase in crime points to a decline in the relative appeal of a neighborhood. This again, however, may be deceptive because crime rates only contain reported crimes. An increase in the number of crimes detected may indicate improved police protection and not an increase in crime. Then,

the same indicator may be interpreted in different ways, giving a different picture of the dynamics of a neighborhood.

The quality of education is very difficult to evaluate. Some educators place greatest emphasis on inputs such as expenditures and student-teacher ratios. Others look at output in the form of student achievement levels. The input data is available in the annual report submitted by the superintendent of schools. Comparisons may be made over a period of several years to determine whether the expenditures on schools has increased or decreased. There are still others, however, who believe the home environment and a child's peers are most critical to his educational achievement and the quality of the school, its facilities and its teachers only secondary. In evaluating changes in the quality of education, one may look at: expenditures per pupil, student-teacher ratios, education level of parents, or achievement test scores. A proxy for parental concern with education may be attendance records. This again is available in the annual report.

As noted above, besides the provision of services, the public sector is largely responsible for making capital improvements such as new highways, recreational facilities and schools. These all may have both positive and negative effects on a neighborhood. The construction of a new highway may change the locational desirability of a particular neighborhood by bringing the area closer to important destinations. On the other hand, a highway may split apart cohesive neighborhoods and disrupt large numbers of households. In planning for a highway, both the monetary and social costs and benefits must be measured.

In analyzing the changes occurring in a neighborhood, the changes that have been induced by the capital improvements must be taken into account. In this case, the indicators of change are aspects of the other two neighborhood elements. One may look at the change in the socio-economic or racial composition of the population surrounding the highway to determine whether the investment increased or decreased the desirability of the neighborhood for wealthier residents. One may determine whether any housing was removed and the type of housing that was removed by looking at the block level census for the period before the construction of the highway. The changes in the value of the remaining housing stock may then be analyzed by comparing the value of the remaining stock before and after the highway construction. If the highway provides an important transportation link for the nearby residents, property values near the highway may rise. If on the other hand, the highway does not serve the needs of the residents, housing values may drop in response to the fumes, noise, and other environmental disruptions caused by the new highway.

An increase in recreational space such as vest-pocket parks, tot lots, skating rinks, tennis courts, and gymnasiums mark an objective improvement in the neighborhood's quality. Data on these additions to a neighborhood are available in the annual report of the Department of Parks and Recreation. In addition, one may look at how existing facilities are cared for and used over a period of time for further information on the dynamics of a neighborhood. Decreased public concern or increased vandalism for example, would be indicated by the accumulation of refuse and glass on a public basket-

ball court. A change from a well-kept and frequently used court to a run-down, dangerous, unused court is indicative of neighborhood decline. One may only measure these sorts of changes through frequent visits and monitoring the area first hand.

The above indicators are all based on action or inaction on the part of the public sector. There are also environmental changes which do not come under the jurisdiction of the public sector. Changes in the type and quality of commercial facilities are important indicators of neighborhood change, controlled by the private sectors. Commercial establishments generally try to gear their stock to the market they serve. If stores begin to stock less expensive clothing or furniture, decline is signaled. The opening of a new, modern, higher priced store, speciality shop, or gourmet restaurant points to an upward transitional neighborhood. A further indication of neighborhood decline is an increase in the number of stores going out of business or store fronts which have been boarded up. Not only does this mark a drop in neighborhood demand but also constitutes a form of visual blight. Similarly, an increase in commercial establishments marks neighborhood vibrancy and growth.

Many older neighborhoods with a commercial district running along the main street of the neighborhood do not have adequate parking facilities for heavy shopping. This inconvenience contributes to the decline of the neighborhood shopping district and contributes to the growth in appeal of suburban shopping centers and suburban residential neighborhoods.

To measure the movement of this indicator, one may keep a running survey of

store openings, closings, and vacancies. A vacancy period longer than the average for the city as a whole is an indication of decline. The quality and price of merchandise in old and new stores may also be monitored for changes over time. Although the data is not readily available, a change in the profit figures for various stores is another measurement of the direction in which a neighborhood is moving. Another labor intensive research method is to perform a head count of the number of people using a particular store during comparable weeks over a several year period. The volume of business may then be compared to determine the direction of movement.

Both public and private actions also contribute to the image of the neighborhood. These factors that contribute most to the level of visual appeal of a neighborhood are: the amount of litter on the ground, the condition of the housing, the amount of abandonment of both the stores and housing, the condition of streets and sidewalks, the amount of defacing of public and private property such as graffiti, or broken windows, and the existence of land uses incompatible with residential uses such as gas stations, vacant lots, and factories or warehouses.

Again, measures of these factors are neither catalogued nor published. Each requires first-hand observations over a period of years. In addition, visual appeal is a subjective indicator which requires a more objective index to be imposed upon it. Photographs of the same places taken at different points in time are a very useful source of data. One may also rank the condition of buildings, sidewalks, and streets according to an explicit rating scheme. The rate of increase in abandonment and rehabilitation

are other objective indicators of decline and upgrading respectively.

The final process of neighborhood change to be discussed is a change in the locational desirability of the neighborhood. This was one of the most critical factors involved in the decline of the Lower East Side as described by Leo Grebler.<sup>12</sup> Mass transit had bypassed this area and industry had moved out. The area eventually became cut off from the rest of the city.

According to location theory, people bid for the most convenient locations.<sup>13</sup> Improved transportation and changes in industrial location, change the time-distance ratio between many neighborhoods and employment locations. Changes in the routes and efficiency of mass transit, changes in the highway system, and changes in the locational choices of industry are all aspects of changes in the locational desirability of a neighborhood. A new rapid transit stop in a neighborhood may improve the desirability of the neighborhood while the curtailment of bus service to downtown or to an employment center is a mark of decline in the desirability of the neighborhood. Each of these may in turn influence what types of people will choose to live in the neighborhood and the value and quality of the area's housing.

Transportation specialists use computer models to note the time required to commute between particular locations by various modes of transportation.<sup>14</sup> These types of models could be used to monitor the relative accessibility of various neighborhoods over time. Also, changes in transit routes and stops, changes in street and highway patterns, and changes in employment location may all be monitored to determine the relative improve-

ment or decline in a neighborhood's locational desirability.

Changes in the neighborhood environment may be charted from many different perspectives, none of the data for which is readily available in published form. Research deadlines rarely allow a ten year data collection period. Old residents and community leaders, people who spend their time in the neighborhood, may be interviewed as important sources of data on all the different aspects of environmental change. They may provide information on when particular changes became obvious and the impacts of these changes on other aspects of the neighborhood.

#### 5.4 SUMMARY

As found in Part I, the three most important research tools available to the analyst of neighborhood change are published documents, interviews, and observations. Because the boundaries for census tracts are held constant and many of the data classifications in the census have remained comparable, the decennial census has come to be the single most important source of data in charting changes in the population and housing. This, however, limits the analyst to changes observable during ten year intervals. It does not allow him to determine when the change first appeared or when it had greatest momentum. During a ten year period as well, several countervailing trends may have occurred, giving the impression of stability. Most of the literature on neighborhood change did not discuss a time frame for the changes documented. Hoover and Vernon in fact claimed that they did not know how long it took for a neighborhood to move from one stage to

the next. They merely listed the indicators that identify that a change has occurred.<sup>15</sup>

Interviews may remedy some of the problems caused by using census data. In a survey of neighborhood residents, one may ask about changes over different time ranges or ask the respondent if certain changes have occurred while they have lived in the neighborhood and the approximate timing and pace of the change. This introduces a subjective element into the analysis. However, people's perceptions of changes in their neighborhood are among the most important reasons for studying neighborhood change. Their perceptions provide data on the desirability of the neighborhood which in turn influences other aspects of the neighborhood. If people are more sensitive to certain changes than to others, these may be the aspects of the neighborhood upon which one should focus remedial programs. People may have more tolerance for certain forms of decline than other forms. In addition, different types of people may be more sensitive to different types of changes. The elderly are not concerned with the quality of schools. Spanish-speaking residents may find a school inadequate if it does not provide a bilingual program while the rest of the population may be very satisfied with the school. This attitudinal information is available from interviews. Also, as noted in the review of the literature on neighborhood change, many changes occur in accord with a self-fulfilling prophecy based on people's attitudes toward their neighborhood and toward other neighborhoods.

The final research technique, participant observation, is only practiced for changes occurring in the short term. Monitoring ten and twenty year changes first hand is an unrealistic research task. First hand observations, however, are an important way to



monitor smaller less obvious changes such as changes in the mood of the residents and their feelings toward their neighborhood, subtle differences in maintenance practices, differences between old residents and new arrivals, and the level of daily city services and neighborhood appearance.

In every case, the changes that occur in a neighborhood are relative. Decline in property values in an area of \$75,000 homes may have different implications than a decline in property values in an area of \$20,000 homes. Similarly, a rise in income in a very high income area does not have the same relevance as a rise in income in a previously low-income area. One must look at the two end points of the change as well as the direction of change and the amount of change that has occurred. One must also look at changes in the context of city-wide trends. If rent levels are rising throughout the city, an increase in the median rent in a specific tract does not indicate upward movement unless the increase is greater than the overall citywide increase in rent levels. Another difficulty in analyzing indicators of neighborhood change is a notion of how large a change in each indicator is significant.

In our own analysis of changes in Jamaica Plain, to follow in the next chapter, we have chosen the ten year period from 1960 to 1970 as the period for which we shall analyze the behavior of various indicators. This allows a comparison between two decennial census periods. Because of the limited time-frame for this investigation, an in depth interview with residents was not possible nor was a several year period of participant observation feasible. A longer interval than ten years did not appear to be necessary for this investigation of the degree of uniformity in the information on neighborhood change provided

by the various indicators.

## Footnotes: Chapter 5

1. Conversation with David Birch, summer, 1974.
2. For a discussion of "tipping-point" see: Eleanor R. Wolf, "The Tipping-Point in Racially Changing Neighborhoods," Urban Planning and Social Policy eds. Bernard J. Frieden and Robert Morris (New York: Basic Books, 1968) pp. 148-155.
3. Martin Meyerson and Edward C. Banfield, Politics, Planning and the Public Interest (Glencoe, Ill.: The Free Press, 1955), p. 135.
4. Peter Rossi, Why Families Move: A Study in the Social Psychology of Urban Residential Mobility (Glencoe, Ill.: The Free Press, 1955).
5. Rolf Goetze, "Conserving the Urban Housing Stock: A Set of Case Studies on the Impact of Government Policy" (unpublished, Ph.D. dissertation, M.I.T., June, 1970), p. 31.
6. Ibid. p.36.
7. See David Birch, et. al. America's Housing Needs: 1970 to 1980 (Cambridge: Harvard-M.I.T. Joint Center for Urban Studies, 1974), Appendix A.
8. This was done in Philadelphia, see: "Data Systems as a Method of Improving the Effectiveness of Housing Programs," Journal of Housing, XXVIII, no. 1(January, 1971).
9. Boston Redevelopment Authority, "Toward a Housing Policy for the City of Boston," (unpublished report, June 1973).
10. U.S. Department of Commerce, Bureau of the Census, 1970 Census of Population and Housing: Census Tracts, Boston, Massachusetts, Standard Metropolitan Statistical Area.
11. See George Sternlieb, The Tenement Landlord (New Brunswick: Rutgers University, 1966).
12. Leo Grebler, Housing Market Behavior in a Declining Area (New York: Columbia University Press, 1952).
13. For a discussion of location theory see: W. Alonso, Location and Land Use (Cambridge: Harvard University Press, 1965).

14. These are called gravity models. See for example: J. Meyers and M. Strassheim, Techniques of Transport Planning: Pricing and Product Evaluation, (Washington, D.C.: Brookings Institute).
15. Edgar M. Hoover and Raymond Vernon, Anatomy of a Metropolis (Garden City, N.J.: Doubleday & Co., 1962), pp. 148-9.

## Chapter 6: A Case Study of Neighborhood Change: The Subareas of Jamaica Plain.

In this final chapter, we shall apply several different indicators of neighborhood change to Jamaica Plain to explore various aspects of change. In particular we want to first, determine whether different indicators of neighborhood change point in different directions or describe a different magnitude or pattern of change and second, we want to analyze the methodology involved in monitoring the various indicators. This knowledge is critical for the evaluation of a neighborhood's dynamics for many public and private decisions.

As noted earlier, most of the literature on neighborhood change does not include a definition of the term, neighborhood. In addition, rarely do any of the neighborhood analysts describe the size of the neighborhood whose changes they are analyzing. These are major flaws in the existing literature on neighborhood change, because as determined in the first section of this study, both the neighborhood definition and the scale of the neighborhood are critical to locating neighborhood boundaries. It is the neighborhood boundaries which in turn determine the radius within which changes are to be analyzed. As the neighborhood size increases, changes are blurred and distinctions are hidden due to area-wide averaging. At too small a scale, minor aberrations from the norm show up too distinctly as fluctuations.

In the third chapter, we learned that Jamaica Plain is a varied neighborhood in terms of its residents, its housing, and its environment and is only a neighborhood on the basis of its well-defined physical boundary. The boundary lines dictated by each of the neighborhood elements, in many cases, reinforce each other at a smaller scale, dividing Jamaica Plain into several subareas that more nearly meet the criteria of a neighborhood than does

Jamaica Plain as a whole. We shall use these subareas as the units within which we shall analyze the indicators of neighborhood change.

Because Jamaica Plain has such diversity in its population, housing, and environment we would expect variations in the neighborhood's dynamics in each of its subareas. Each of these subareas developed in response to different forces and continue to be influenced by different circumstances. Aggregating the entire neighborhood would cause conflicting area-specific trends to counteract each other. As is clear from Table 6.1, changes in Jamaica Plain as a whole differ greatly from those in each of the individual tracts. Specifically, the proportion of low income residents appears to have remained constant in Jamaica Plain over the decade, yet when disaggregated by tracts, Tracts 1202, 1203, and 1205 experienced an increase in low income people, Tract 1201 remained unchanged, and Tracts 1204, 1206, and 1207 experienced a decrease in low income residents.

The data required for analyzing changes which have occurred in each of these subareas is most readily available in the decennial tract level census. The tract boundaries, however, do not exactly reflect the finer grained diversity of housing value as evidenced in a block by block analysis. Neither do they accurately coincide with the boundaries of social groups or visual subdivisions. Aggregations of census tracts do, however, roughly approximate the subneighborhoods defined according to the various neighborhood elements and are the most operational neighborhood boundary lines available.

The subareas to be analyzed in this chapter are aggregations of census tracts which were found to be similar on the basis of a socio-economic index constructed with 1960 census

Table 6.1

## Changes in Jamaica Plain

	Jamaica Plain		Tract 1201		Tract 1202		Tract 1203		Tract 1204		Tract 1205		Tract 1206		Tract 1207	
	1960	1970	1960	1970	1960	1970	1960	1970	1960	1970	1960	1970	1960	1970	1960	1970
% Spanish	.7%	↑ 7%	0	↑ 1%	0	↑ 4%	0	↑ 12%	.3%	↑ 3%	0	↑ 28%	0	↑ 12%	0	↑ 5%
% Irish	18%	↓ 13%	24%	↓ 18%	24%	↓ 11%	11%	↓ 9%	15%	↓ 13%	12%	↓ 8%	17%	= 17%	22%	↓ 13%
* % Income < \$5,000	18%	= 18%	11%	= 11%	19%	↑ 20%	19%	↑ 24%	21%	↓ 20%	21%	↑ 29%	20%	↓ 14%	16%	↓ 13%
% Income > \$15,000	32%	↑ 41%	26%	↑ 65%	12%	↑ 40%	14%	↑ 33%	12%	↑ 48%	9%	↑ 25%	13%	↑ 46%	15%	↑ 59%
% White Collar (male)	42%	= 41%	58%	= 58%	29%	↑ 37%	29%	↓ 27%	41%	↓ 36%	27%	↓ 26%	36%	↓ 30%	48%	↑ 63%
< 8th Grade	35%	↓ 29%	22%	↓ 16%	37%	↓ 34%	40%	= 39%	33%	↓ 30%	43%	↑ 45%	32%	= 31%	25%	↓ 20%
High School Grad	31%	= 31%	33%	= 34%	34%	= 33%	26%	↓ 24%	33%	↓ 30%	25%	↑ 28%	30%	↑ 34%	33%	= 33%
College Grad	9%	↑ 12%	16%	↑ 21%	2%	↑ 7%	5%	= 5%	8%	↑ 11%	2%	↑ 3%	8%	↓ 5%	14%	↑ 21%

\*all \$ figures converted to 1970 \$'s.

Source: U.S. Department of Commerce, Bureau of the Census, 1960 Census of Population and Housing: Census Tracts, Boston Massachusetts, Standard Metropolitan Statistical Area, and 1970 Census of Population and Housing: Census Tracts, Boston Massachusetts, Standard Metropolitan Statistical Area.

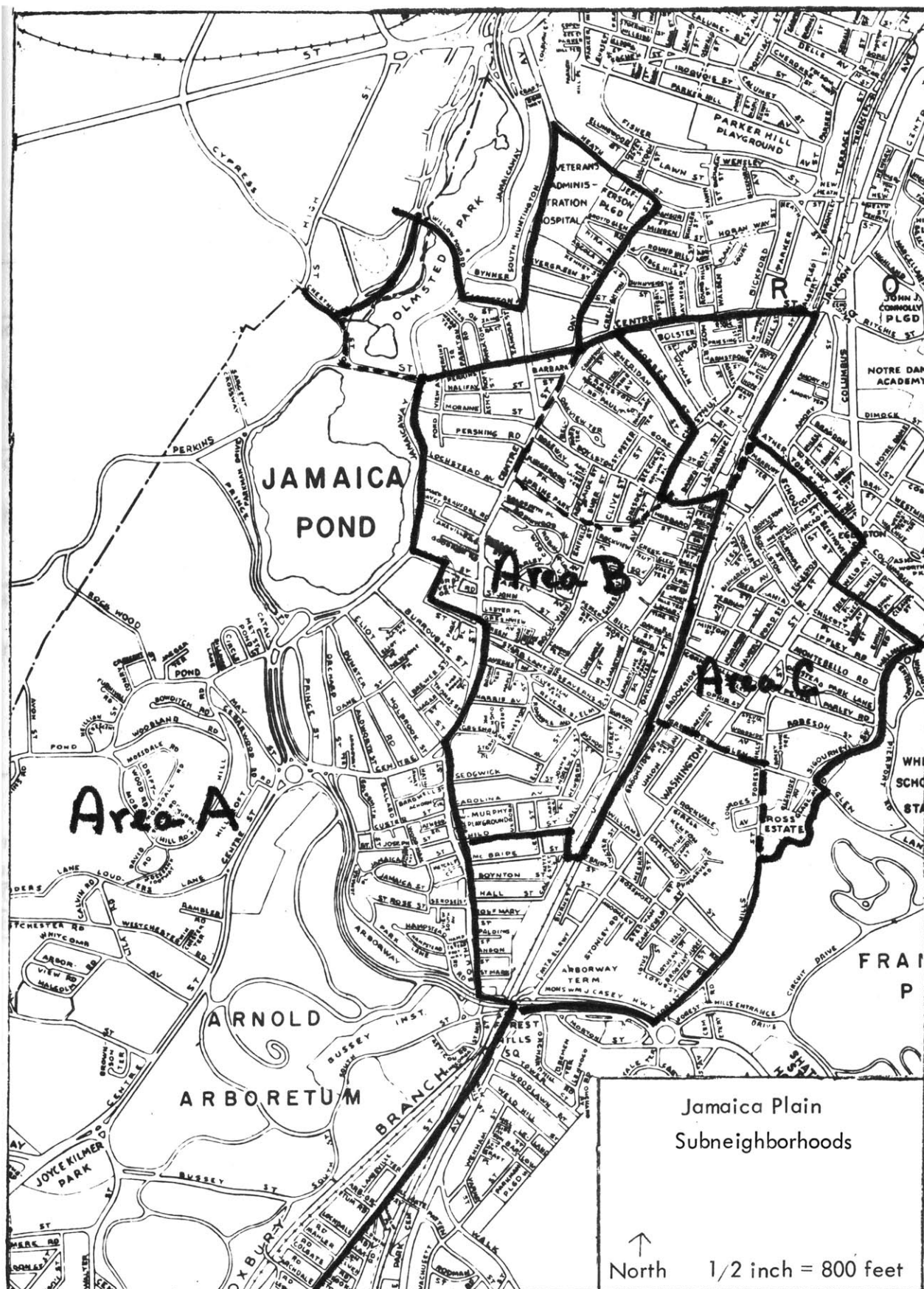
tract data. Because census tract data is published on a decennial basis, we shall base our analysis of Jamaica Plain on changes that have occurred in each of its three component subneighborhoods during the ten year period from 1960 to 1970.

We shall refer to these subareas as Area A, Area B, and Area C. The boundary lines and component census tracts for each are outlined on Map 6.1. The socio-economic status of each tract relative to Boston in 1960 was the index used to establish the boundaries of the three subareas. Table 6.2 provides a detailed breakdown of the index score for each tract in both 1960 and 1970.

The western-most section of Jamaica Plain, Area A, was highest status and well above the status level for Boston as a whole. The status score for Area B, the central section of Jamaica Plain, closely paralleled that for Boston in 1960. Finally, Area C, the eastern sector of Jamaica Plain had a status score below that of the City of Boston.

Over the course of the ten year study period, under investigation the subneighborhood boundaries shifted because different portions of certain subneighborhoods changed in different ways. At the end of the ten year interval, portions of each subneighborhood more closely resembled a different subneighborhood. This may be attributed to the initial inaccuracy of the subneighborhood boundaries being used for this investigation as well as the outward spread of changes. This was most obvious in the case of the boundaries between Areas B and C, where the northern portion of Area B (Tract 1206) more closely resembled Area C at the end of the decade and the southern portion of Area C (Tract 1202) more closely resembled Area B in 1970.





Map # 6.1

Source: Boston Redevelopment Authority Map # D-36

Table 6.2

SEI for 1960 and 1970

	Income	Ratio × Education	Ratio × Occupation	Ratio =	SE:			
	1960	1970	1960	1970	1960	1970	1960	1970
Area A								
Tract 1201	1.34	1.4	1.1	1.03	1.6	1.35	2.36	1.95
1207	1.25	1.04	1.08	1.27	1.3	1.47	1.8	1.96
Area B								
Tract 1204	1.05	.99	1.06	1.06	1.1	.84	1.2	.88
1206	1.1	.93	1.03	1.03	1.0	.67	1.13	.64
Area C								
Tract 1202	1.05	.97	.95	.94	.81	.86	.81	.78
1203	1.06	.85	.93	.84	.81	.63	.8	.45
1205	.92	.8	.88	.79	.74	.6	.6	.38

Source: U. S. Department of Commerce, Bureau of the Census, 1960 Census of Population and Housing: Census Tracts, Boston, Massachusetts, Standard Metropolitan Statistical Area, and 1970 Census of Population and Housing: Census Tracts, Boston, Massachusetts, Standard Metropolitan Statistical Area.

Data on changes in the level of municipal services provided to Jamaica Plain was very difficult to acquire at the full neighborhood level and impossible to break down by subareas. Where possible, we shall include the small amount of data on environmental changes we were able to collect in the limited amount of time within which this study was conducted.

Because neighborhoods are situated within cities, any neighborhood level analysis must be conducted within the context of the characteristics of the larger city. If for example, the median income for a particular neighborhood is rising at a rate of ten percent, this neighborhood can only be labelled as an upward transitional neighborhood if the median income for the city as a whole has risen less than ten percent over the same period. The trends occurring in one neighborhood may also be compared with those occurring in other neighborhoods.

Most of the theories of neighborhood change cited earlier in this study pointed to a high correlation among changes in various indicators. In this chapter, we shall see, using existing data, whether the commonly used indicators of neighborhood change do point towards the same process or whether various indicators provide conflicting information in each of the three subneighborhoods defined above. To set a framework for the discussion of each subarea, we shall introduce each with a brief qualitative discussion of the major trends for the decade. This will be followed by a more quantitative application of the various measures of change.

## 6.1 THE CHANGES IN AREA A

Area A is the westernmost section of Jamaica Plain. A large part of the area borders

park land and the affluent community of Brookline. This is the subneighborhood of Moss Hill. The remainder of Area A has a suburban atmosphere, although some portions border the South St. shopping district. One long time resident of the northern section of Area A described his immediate neighborhood as "upper-middle class but not wealthy." He characterized the residents of Moss Hill as "well-to-do Irish."<sup>1</sup>

Most indicators point to improvement in Area A (see table 6.4). Specifically median income, housing value, and rent are all rising relative to Boston. Exceptions to this upward trend are: educational attainment and the proportion of white collar employees. These have not kept up with the city trends, but have risen slightly.

In 1960, all of Area A ranked high on the socio-economic index (SEI) relative to Boston. The Southern area (Tract 1201) had an extremely high score. Over the course of the decade, Area A maintained its high status but the gap between the northern and southern portions of the subneighborhood vanished. The construction of Jamaica Towers, a luxury apartment building, in the northern section (Tract 1207) caused this to be the only portion of Jamaica Plain to experience an upward movement in both the population and the housing indicators of neighborhood change. Also contributing to the closing of the status gap between the northern and southern portions of Area A is a decline in the white collar population in the southern section of the subneighborhood. Although this entire subneighborhood did not behave uniformly in terms of the socio-economic index, over all, as noted above, Area A is an upward transitional neighborhood.

The continued high status of Moss Hill and its surrounding area is most apparent from

Table 6.3  
Changes in Boston  
1960 to 1970

	1960	1970	% Change
Median Income	*7,417	9,133	+22%
Educational Attainment	11.2	12.1	+8%
% White Collar (male)	36% . . . . .	43%	**+19% . . . . .
% Spanish-Speaking	.3%	2.8%	-
% Irish	10.7%	8%	** -25%
Median Housing Value	*17,550	19,600	+12%
Median Rent	*101	126	+25%
% Owner Occupied	27%	11%	** -59%
% Overcrowded	8%	7.6%	** -5%

\* 1970 dollars

\*\* Because the base population changed in size, here we are only looking at the proportional change. One may alternatively look at the percent change in the absolute numbers

Sources: U.S. Department of Commerce, Bureau of Census, 1960 Census of Population and Housing: Census Tracts, Boston, Massachusetts Standard Metropolitan Statistical Area, and 1970 Census of Population and Housing: Census Tracts, Boston, Massachusetts Standard Metropolitan Statistical Area.

Table 6.4

Changes in Area A  
1960 to 1970

	*Area A				Tract 1201				Tract 1207			
	1960	1970	% Change	% Change Relative to Boston	1960	1970	% Change	% Change Relative to Boston	1960	1970	% Change	% Change Relative to Boston
Median Income	9,659	12,373	+28%	+6%	10,032	12,653	+26%	+4%	8,402	11,595	+38%	+16%
Educational Attainment	12.3	12.5	+1.5%	-6.5%	12.3	12.5	+1.5%	-6.5%	12.1	12.6	+4%	-4%
% White Collar (male)	56%	59%	+5%	-14%	58%	58%	0%	-19%	48%	63%	+31%	+12%
% Spanish-Speaking	0	1.8%	---	---	0	.1%	---	---	0	4.5%	---	---
% Irish	23.6%	16.8%	-29%	-4%	24%	18%	-25%	0%	22%	13%	-41%	-16%
Median Housing Value	24,818	29,507	+19%	+7%	25,740	29,800	+16%	+4%	18,200	21,400	+18%	+6%
Median Rent	118	152	+29%	+4%	116	139	+20%	-5%	121	170	+40%	+15%
% Owner Occupied	47%	41%	-13%	+46%	53%	51%	-4%	+55%	25%	16%	-36%	+23%
% Overcrowded	6%	4%	-33%	-28%	6%	4%	-33%	-28%	6%	4%	-33%	-28%

\*Calculated using weighted averages of Tracts 1201 and 1207.

Source: U.S. Department of Commerce, Bureau of the Census, 1960 Census of Population and Housing Census Tracts, Boston, Massachusetts Standard Metropolitan Statistical Area, and 1970 Census of Population and Housing: Census Tracts, Boston, Massachusetts, Standard Metropolitan Statistical Area.

the high proportion of single family homes and home-ownership. During the ten year period under study, the number of owner-occupied homes in this area continued to rise, unlike in the city as a whole where there was a drop in owner-occupancy. On the other hand, the northern portion of Area A rose in status by virtue of the introduction of a luxury high rise apartment building. Unlike the Moss Hill residents who have a sense of loyalty to their neighborhood, the Jamaica Tower residents are merely commuters concerned primarily with their transportation link to downtown Boston and care very little about Jamaica Plain or even their immediate surroundings.

All of Area A is located within a short walk of open-space and recreational facilities. It is also close to the Arborway trolley line which goes to both downtown Boston and to the many hospitals just north of Jamaica Plain. The location of this area is further enhanced by easy access to the Jamaicaway for driving into Boston's central business district.

The original settlement patterns of this area are also revealing. The housing in most of Area A was built for wealthier people. It is far from the industrial area along the railroad tracks and the housing built for the industrial workers in the surrounding area. Much of Area A has maintained its suburban or even rural atmosphere, thus preserving its demand. This in turn prevents property values and rent levels from dropping as has happened in much of Jamaica Plain. The property values in Area A are, however, lower than those for comparable houses in the more affluent independent suburban towns like Brookline and Newton.

We may only compare the rates of change of variables which are measured in the same units. Of the three monetary measures under investigation, median income, value, and

rent; rent and income have risen at the same rate with housing values lagging behind. However, when compared to changes in Boston, all three indicators appear to be moving at a similar rate. This rapid rise in income and rent may once again be explained by the introduction of Jamaica Towers into the area. The average rent for the block in which the building is located is \$226 as compared to \$172 for the tract.

Although the higher status of the residents of Jamaica Towers is responsible for the upward transition in the area's status rating, surrounding residents do not necessarily regard the construction of this building as a neighborhood improvement. The building has blocked many people's view of Olmstead Park and increased the traffic on the Perkins St., thus harming the neighborhood's environment. In addition, the residents of the building are not people who moved from within Jamaica Plain, but professional people from other areas who enjoy the pleasant view of Olmstead Park and the easy access to downtown Boston provided by the Jamaicaway. This building is in many ways a subneighborhood of its own. As noted above, it has a much higher rental scale than the tract as a whole. If the available data were sufficient to separate out Jamaica Towers from the rest of the tract, probably the surrounding area would more correctly be aggregated with lower status, Area B. Referring back to Map 3.11, we may see that the eastern portion of the tract does resemble Area B in terms of housing status. Income data is not available at the block level, making a comparable analysis of income impossible.

The Moss Hill residents fear the potential construction of high rise apartments and condominiums in their neighborhood. They believe such a trend will lower their property values



and detract from the current environment characterized by open-space and low density.<sup>2</sup> Again, although wealthier people live in high rise, luxury towers, these buildings are not necessarily a positive contribution to a neighborhood.

Changes in the racial and ethnic composition of a neighborhood's population have received a large amount of attention in the literature. Although no definitive statement has been made concerning the relationship between property values and race in transitional neighborhoods, there is a higher incidence of poverty and inadequate housing among minority people than among non-minority people. The Black population on Area A has remained negligible throughout the decade, however, there is a slightly different trend in the case of Spanish-speaking residents. The Southern area still has very few Spanish-speaking residents. In the northern section, however, the proportion of Spanish-speaking residents is just a little over half that for the city as a whole. They are most heavily concentrated in the eastern part of Area A, bordering on the less affluent Area B, further evidence of the heavy impact Jamaica Towers has on the aggregate statistics for Tract 1207. It is important to note that over ninety percent of the Spanish-speaking residents in this section of Jamaica Plain are Cuban, while in the whole of Jamaica Plain, Cubans represent less than half of the Spanish speaking residents. The Cuban immigrants have a different life style than Puerto Rican residents. They are much more concerned with upward mobility.<sup>3</sup>

Over the course of the decade, Area A has increasingly become an area of small households, but not student households as has been occurring in the rest of the city. Rather,

Area A may be an area of what is commonly known as "empty nesters" or households without children or with grown children no longer in the home. This is certainly the case for Jamaica Towers and all similar structures that may be built in the future. In that part of Area A where Jamaica Towers is situated, the median household size is only 1.9, a drop from 2.6 in 1960. In addition, the proportion of children in Area A dropped more rapidly than in Boston. This trend may be reinforced by the differential between the quality of the city's schools and those in the suburbs. Wealthier families with children would be less interested in living in the city than those who do not have to worry about the quality of education offered to their neighborhood.

As noted earlier, the housing in Area A is strongly dichotomized between the north and south, in terms of tenure, although currently the housing in both areas is rated as "standard comfortable" on Coleman's seven-level index. Moss Hill has one of the largest percentages of single family homes and home-ownership in the city of Boston. The rest of Tract 1201 has small enclaves of home ownership but, home ownership is not predominant as in the Moss Hill section. In 1960, over half of the area's units were owner-occupied compared to a little over a quarter for the city. By 1970, the absolute number of owner-occupied units in the southern portion of Area A had risen although there was a slight proportional decline. In Boston, however, there was both an absolute drop in the number of owner-occupied units and a proportional drop to only one tenth of the housing stock, reinforcing the uniqueness of this portion of Jamaica Plain. Like Boston, in 1960, a quarter of the units in the northern section of Area A were owner-occupied. The drop in proportion was much less severe than that for the city, although it represents the lowest proportion of

owner-occupied single-family units in all of Jamaica Plain.

Owner-occupancy is commonly associated with neighborhood stability, in that people who have made such a large investment are less likely to move and will tend to take a greater interest in their neighborhood. This is very much the case in Moss Hill where the Jamaica Plain Association is very active in maintaining the neighborhood and is working towards preserving their neighborhood's special image. This takes the form of opposing high rise apartment development as well as guarding each others homes during vacations.<sup>4</sup>

Although the housing in the northern section of Area A has risen in status from "standard marginal" to "standard comfortable," this area has more of a transient atmosphere than the southern area. It has no commonly known name or community group. The residents of Jamaica Towers have very little concern for the comforts and needs of their neighbors outside their building. On a block by block analysis, the eastern portion of the tract has declined in housing status over the decade. The vacancy rate for rental units in this area has risen from less than one percent in 1960 to nearly four percent, while it is less than two percent for Boston. In addition, the current vacancies are in the lower rent units. Although the luxury apartment building has upgraded the status rating for the area, it has not served to increase the demand for lower rent units, nor has it induced an upgrading in the status of the surrounding area.

A study conducted for the BRA comparing sales prices of housing between the period of 1952 to 1955 and 1962 to 1965 found that the strip of Jamaica Plain along Olmstead Park, Jamaica Pond, and Arnold Arboretum had rising property values during the decade they studied<sup>5</sup> (see Appendix D for their exact findings). This finding points to the impor-

tance of location and environmental quality in the determination of property values.

✓ The environmental indicators for subneighborhoods were much more difficult to monitor and will only receive a cursory treatment in this study. A police officer in the Jamaica Plain district explained that the crime rate is rising throughout the country. In Jamaica Plain, the Moss Hill area was least heavily impacted by personal crimes but had a high level of burglaries.<sup>6</sup> It is unclear whether the rate of burglaries in this area has increased at a different rate than crime in general. The kind of crime in the area is however, an indication of the area's affluence. Personal crimes are more prevalent in poorer areas.

Area A is split between two school districts. The northern section is serviced by the same schools as Bromley-Heath Public Housing, the Kennedy-Jefferson District. Very few of the new wealthier residents have school aged children and although the area has had a rise in population, elementary school enrollment has dropped during the decade. In addition, only thirty percent of the area's school children attended public school in both 1960 and 1970. Many probably attended the school for the Blessed Sacrament Parish and maybe others were sent to private schools.

We do not have 1960 figures for school expenditures for the Kennedy-Jefferson district but based on 1970 figures, the per pupil expenditure for this district is about seven percent less than that for the city as a whole. In addition, the absence rate for 1970 is slightly higher than for the city as a whole.<sup>7</sup> Of the three schools in this district, one was built in 1892 and another in 1904. The Kennedy School is the most recent, built in 1962.<sup>8</sup>

Although these facts do not give a full picture of the quality of education provided

by the district's schools, they do indicate that this district is neither among the heaviest endowed financially nor one with either the best attendance record or the best school facilities. This may contribute to the decline in school age children in the northern section of Area A and to the continued reliance on non-public schools.

The Agassiz School District serves much of the southern part of Jamaica Plain. Recently a new school, which also serves as an important community center, was constructed in this district. Between 1960 and 1970 per pupil expenditures in this district did not rise as quickly as in the rest of the city. In 1960, the level of expenditure in this district was equal to the city wide per pupil expenditure, but by 1970, like the Kennedy-Jefferson district, the city wide expenditure was seven percent higher.<sup>9</sup> This district does, however, have an improving attendance record. A much larger proportion of the Area A children in this district attend public school than in the Kennedy-Jefferson District and the proportion is growing. The residents of this section of Area A are then, more heavily influenced by what happens to the area's elementary school than are residents in the northern section.

In the above analysis, we found first, that in Area A, the indicators of neighborhood change do not all point in the same direction. On the basis of socio-economic status, Tracts 1201 and 1207 fall within the range of high status tracts. Over the course of the decade, however, Tract 1201 declined in status while tract 1207 improved, bringing them both to the exact same status from the vantage point of 1970. However, the dominant elements and the major trends in the two areas are quite different. One is predominantly a suburban area of home-owners within the bounds of the city proper. The other contains

many nursing homes and primarily rental units, with a new high rise. While property values, rent, and income are rising in the first, Tract 1201, the overall status of the residents has declined. In the second, the northern section the status of the residents has risen. The amalgamation of these two tracts into a single area has blurred some of the downward movement in Tract 1201. Similarly, if the high-rise were excluded from the analysis of Tract 1207, the downward movement in rent and value of the remainder of the tract would become apparent, putting the tract in a lower status group.

Although data is not available to prove this, we believe the Moss Hill portion of Tract 1201 has maintained its status or may even be experiencing an improvement in status. The decline in Tract 1201, is occurring in that portion of the tract bordering on Centre St. and South St. On the basis of interviews and observations, we know that absentee ownership has begun to be more prevalent here; there is a public housing project in this area; and there is a commercial strip with its blighting influences. Several of the larger houses in this area have been turned over to institutional use, further evidence of a decline in status.

From this, we may conclude that aggregating two tracts that are apparently similar in socio-economic status may distort the analysis of changes in the area. In addition even in 1960, both tracts had distinctive subareas. In Tract 1207, there was: a subsection resembling Moss Hill, a portion of triple deckers, a section of hospitals and nursing homes, and finally a section of lower quality housing just east of South Huntington Ave. Over the course of the decade, each section underwent individual

changes. In the western section, the suburban area was replaced by a luxury apartment tower. The nearby triple deckers have slowly been moving from owner-occupancy to absentee ownership and the area east of South Huntington Ave. has become Spanish-speaking.<sup>10</sup> The introduction of such a dominant factor as Jamaica Towers into the area overwhelmed the other critical trends. In the instance of such a diverse census tract, or a tract with a dominant factor which is dissimilar from the remainder of the area, further disaggregation is necessary for an accurate analysis of the area's dynamics.

Similarly, Tract 1201 divides into Moss Hill, the suburban section bordering Jamaica Pond, and the area bordering the commercial strip. Again each moved in a particular way. Moss Hill remained in tact while the other two less protected areas began to decline. This is in keeping with the theories of ghetto expansion discussed in Chapter 4. Area A is the portion of Jamaica Plain most removed from Roxbury and Dorchester, the "inner-city" neighborhoods. Downward trends are, however, observable in the easternmost portion of Area A. This may in part be a result of the outward spread of the poorer population. Moss Hill, with its strong neighborhood association, political clout (several important political figures have lived in Moss Hill), and its protective high elevation was able to isolate itself from the downward forces active throughout both Jamaica Plain and the rest of the city.

## 6.2 CHANGES IN AREA B

In 1960, Area B closely resembled Boston in socio-economic status. By 1970, however, it dropped below the status level for the city. Most of the indicators reveal that

Area B is a declining area (see Table 6.5). The increases in median income and rent occurring in Area B did not keep pace with those for the city as a whole. In addition, housing values declined drastically.

Unlike Area A where the two sections of the subneighborhood appeared to become more similar over the decade, in Area B, the two areas moved further apart. The southern portion remained at a medium status level while the northern section dropped severely in status. The apparent differential in behavior between the two sections of Area B may largely be attributed to that portion of the southern section between Centre St. and Jamaica Pond whose higher status and stability more closely resembles Area A than Area B. This is the only portion of Area B which borders on open space. This discrepancy is a result of the way in which census boundaries were drawn.

A large part of the decline in status of Area B may be traced to the lower educational attainment, occupational status, and income level of the Spanish-speaking residents who recently arrived in the area. Along with the indicators of population change, the primary housing indicators for Area B also point downward. Rent levels declined at a slow pace while housing values dropped rapidly.

Currently, neighborhood residents are protesting the red lining practices of the local banks.<sup>11</sup> They believe the actions of the banks are contributing to the decline in the property values in this portion of Jamaica Plain. The fact that values are declining and banks are disinvesting is interesting in that much of Area B was the location of a combined code enforcement and loans and grants program. These programs are geared toward



Table 6.5

Changes in Area B  
1960 to 1970

## Area B

## Tract 1204

	1960	1970	% Change	% Change Relative to Boston	1960	1970	% Change	% Change Relative to Boston	1960	1970	% Change	% Change Relative to Boston
Median Income	7,967	9,561	+20%	-2%	7,861	9,670	+23%	+1%	8,195	9,363	+14%	-8%
Educational Attainment	11.8	11.8	0	-8%	11.9	12.0	+1%	-7%	11.5	11.2	-3%	-11%
% White Collar (male)	39%	34%	-13%	-32%	40%	36%	-10%	-29%	36%	29%	-19%	-38%
% Spanish- Speaking	0	5.6%	---	---	.2%	2.5%	---	---	0	12%	---	---
% Irish	16%	14%	-12.5%	+12.5%	15%	13%	-13%	+12%	17%	17%	0	+25%
Median Housing Value	17,794	16,285	-8%	-20%	17,940	16,700	-7%	-19%	17,290	14,600	-16%	-28%
Median Rent	115	126	+10%	-15%	116	128	+10%	-15%	112	124	+11%	-14%
% Owner Occupied	31%	28%	-10%	+49%	31%	28%	-10%	+49%	32%	29%	-9%	+50%
% Overcrowded	6.7%	5%	-25%	-20%	6%	4%	-33%	-28%	8.4%	7%	-16.7%	-11.7%

Source: U.S. Department of Commerce, Bureau of the Census, 1960 of Population and Housing: Census Tracts, Boston, Massachusetts, Standard Metropolitan Statistical Area and 1970 Census of Population and Housing: Census Tracts, Boston, Massachusetts, Standard Metropolitan Statistical Area.

stabilizing this subneighborhood which was seen as declining mildly and only needing a small boost to curb the downward trend. Here the financial institutions are acting at cross-current to the city.

As Area A has benefited from its history, Area B is a victim of its history. Much of Area B is bordered by the railroad tracks that served as the original nucleus of Jamaica Plain. The industry and low cost housing that characterized this area in the nineteenth century have contributed to the area's current state of decay. In addition, because of the uncertain future of the Southwest Corridor, few are willing to invest in this area. Much of the length of the unused railroad right of way is rubble. Few houses remain and a large portion of those that do remain are undermaintained.

Although the various indicators are moving at a different rate, Area B is clearly a declining neighborhood in terms of all three neighborhood elements. The future of this subneighborhood is closely tied to the future of the Southwest Corridor and the population housing, and environmental changes it may induce.

In a more detailed look at Area B, we see that the downward movement in socio-economic status of this subneighborhood had its roots primarily in the area's extreme drop in white collar workers. Education dropped at a slow rate while income dropped very slightly.

As in the case of Area A, the rise in the area's black population is negligible as compared to the city of Boston. The Spanish-speaking population again has experienced a marked rise, especially in the northern portion of the neighborhood. 1968 marks the point at which the trend gained its greatest momentum with over sixty percent of the

Spanish-speaking residents moving to their current homes between 1968 and 1970. More than half of the new Spanish-speaking residents arrived in Jamaica Plain from abroad, again largely from Cuba.

Although Area B experienced a major influx of new residents, surprisingly, the Irish population did not drop nearly as rapidly as in the rest of the city or even as rapidly as in other sections of Jamaica Plain. This may be because these moderate income people have few options in terms of other affordable housing. Also, the strength of the Church may have kept the original residents from leaving during this period of ethnic transition.

The ethnic transition has not been totally smooth. The stores and entertainment establishments in the northern portion of the neighborhood are now divided between Spanish and Irish ownership and use. During the summers, fights have broken out between the Spanish-speaking and the Anglo teenagers as to whose turf this area is. The frictions have slowly been reconciled over the past year.<sup>12</sup> If the fighting had continued, the outmigration of the Irish and other Anglo residents may have been hastened. According to records being kept at the Jamaica Plain Little City Hall, the Spanish in-migration has ended and the Spanish-speaking population is remaining at a stable level.<sup>13</sup> This new population group is also of a lower socio-economic status than the rest of their neighbors. If they are excluded from the analysis, Area B would have registered very little status decline over the decade.

Over the study period, the housing in Area B has remained at the "standard marginal" level. In 1960, the area's median rent was ten percent higher than that for Boston, but

the neighborhood did not keep pace with the rising rents for the rest of the city and by 1970, Area B had the same median rent level as the city. Although rents are not rising in line with the Boston rent levels, the Spanish-speaking residents are paying much higher rent than the rest of the neighborhood's population. This may have its basis in discrimination. On the other hand, because the Spanish-speaking residents do have larger households, they may be renting the larger units in the neighborhood, thus paying greater rent. The fact that overcrowding is decreasing is further evidence that they may be selecting larger units. Median housing value experienced an even more severe decline than did rent, especially in the northern area. This trend in housing values is confirmed by the BRA study of sale prices. Although housing values are declining, owner occupancy is remaining relatively stable compared to Boston, especially in the northern sector of Area B. Owner-occupancy may be another factor that has helped to reinforce the apparent continued loyalty of the Irish residents to their neighborhood. The level of owner-occupancy however, may be threatened over the course of the next several years because of the unavailability of mortgages in this area. This is the banks' way of saying that this is a declining neighborhood. It is also their contribution to the process.

As noted above, the easternmost portion of Area B experienced some demolition and decay in anticipation of the proposed expressway that was to run along the railroad right of way. This is a significant factor in the decline in housing values and the decrease in owner-occupancy that did occur.

Besides decreases in property values and declining housing quality in this area, there

has been a rise in crime in the immediate and surrounding areas. From the vantage point of 1966, the District 13 Police Chief noted that absentee landlords had begun to take possession of a large number of properties in the Southwest Corridor area and were renting these units to very low income people who were in turn the cause of much of the neighborhood's crime. The officer was, however, confident that the crime rate would quickly decline when the highway was completed and the area was redeveloped.<sup>14</sup> Unfortunately, the highway plan has been dropped and the redevelopment of the area as a mass transit route is still in the planning stages.

Another important aspect of Area B's environment is the shopping district along its western border. As noted earlier, most of the stores along this strip sell low quality merchandise and are burdened by a lack of parking space. From the low vacancy rate in the commercial space, it appears that although suburban shopping centers offer a continuous threat to strip commercial enterprises, this area is still viable. Purse snatching is quite prevalent along this street and is an ever increasing problem. Unlike in Area A, where most of the crime was property-related, Area B is threatened with personal crimes.

This neighborhood has the advantage of proximity to the Arborway trolley line but does not have the visual amenities found in Area A. There is no major open space in this neighborhood. The one small park is in the midst of the rubble of the Southwest Corridor. When the rapid transit line along the corridor route is completed, this area may take an upward swing.

In short, most indicators point to Area B as a declining neighborhood. The rate of

decline indicated by each, however, varies. Income is dropping most rapidly, followed by housing value, then rent. Decline was most severe in that section of the neighborhood with the largest proportion of Spanish-speaking residents.

As in the case of Area A, the way in which census boundary lines were drawn strongly influenced the trends that emerged from looking at indicators of change. The portion of Area B bordering on Jamaica Pond more closely resembles Area A than Area B. In addition, the easternmost portion of Area B, along the Southwest Corridor also differs from the area bounded by Centre St. and Chestnut Ave. The northernmost area is influenced by its border with Roxbury, the poorest area of Boston.

Because Area B is not truly a neighborhood by any of the criteria established in the first half of this study, but is instead assumed to be homogeneous, the analysis of changes within it are not totally reliable.

Another problem encountered in this analysis is a suitable method for analyzing changes in an indicator when the size of the base population has changed. For example, in Area B, owner-occupancy has dropped from thirty two percent of the population to twenty nine percent. It then appears that the area is undergoing a reduction in owner-occupancy, when in fact the housing stock has expanded and the actual number of owner occupied units has remained unchanged. Other indicators with similar difficulties in interpretation are changes in racial composition, occupational status and overcrowding.

### 6.3 CHANGES IN AREA C

Area C, the easternmost part of Jamaica Plain was the lowest status subneighborhood

in 1960. All three tracts which make up Area C were similar in status in 1960, with the northernmost section having a slightly lower status than the rest of the area.

As in the case of Area B, over the course of the decade, different sections of the subneighborhood moved along different courses. The northern and central areas dropped rapidly with the central section having the most marked decline in status in all of Jamaica Plain. The southernmost portion of Area C remained almost stable in status throughout the decade and by 1970 closely resembled Area B in status (See Table 6.6).

This subneighborhood takes in a variety of the cohesive neighborhoods noted in Chapter 3. Once again, the boundary lines of these cohesive neighborhoods do not exactly match the tract boundaries. To the north is a portion of the low status Spanish-speaking Hyde Square neighborhood. Just southeast of this is Egleston Square, the lowest status section of Jamaica Plain. One source commented that eighty percent of the residents of the Egleston Square neighborhood are welfare recipients. Still farther south is the largely Irish, higher income neighborhood called the Peter Parley Road Neighborhood. To the south of this again lies a lower status Spanish-speaking neighborhood called Forest Hills. Area C is a lower income area with a high proportion of Spanish-speaking residents in all except the Peter Parley Road Neighborhood. The subneighborhood's low status in 1960 probably allowed this massive influx of Spanish-speaking residents whose low education level and earning capacity contributed to a further decline in the area's status.

Like Area B, Area C was heavily impacted by the blighting force of the Southwest Corridor. Additional factors in this subneighborhood's decline are its borders with the

Table 6.6  
Changes in Area C  
1960 to 1970

	Area C				Tract 1202			
	1960	1970	% Change	% Change Relative to Boston	1960	1970	% Change	% Change Relative to Boston
Median Income	7,625	7,915	+4%	-18%	7,836	8,558	+9%	-13%
Educational Attainment	10.3	10.7	+4%	-12%	10.6	11.7	+10%	+2%
% White Collar (Male)	28%	31%	+11%	-8%	29%	37%	+28%	+9%
% Spanish- Speaking	0	12%	---	---	0	4%	---	---
% Irish	18%	10%	-44%	-19%	24%	11%	-54%	-29%
Median Housing Value	13,390	13,260	-1%	-13%	13,000	13,800	+6%	-6%
Median Rent	103	125	+21%	-4%	104	131	+26%	+1%
% Owner Occupied	25%	23%	-8%	+51%	26%	26%	0	+59%
% Over- crowded	10%	9%	-10%	-5%	11%	10%	-9%	-4%



Table 6.6  
Changes in Area C  
(continued)

	Tract 1203				Tract 1205			
	1960	1970	% Change	% Change Relative to Boston	1960	1970	% Change	% Change Relative to Boston
Median Income	7,891	7,651	-3%	-25%	6,839	7,186	+4%	-18%
Educational Attainment	10.4	10.3	-1%	-9%	9.8	9.7	-1%	-9%
% White Collar (Male)	28%	27%	-4%	-23%	27%	26%	-3%	-22%
% Spanish Speaking	0	12%	---	---	0	28%	---	---
% Irish	11%	9%	-18%	+7%	12%	8%	-33%	-8%
Median Housing Value	13,910	13,300	-4%	-16%	13,000	12,000	-8%	-20%
Median Rent	104	125	+20%	-5%	98	111	+13%	-12%
% Owner Occupied	26%	26%	0	+59%	22%	22%	0	59%
% Over-Crowded	11%	10%	-9%	-4%	10%	12%	+2%	+25%

Source: U. S. Department of Commerce, Bureau of the Census, 1960 Census of Population and Housing: Census Tracts, Boston, Massachusetts, Standard Metropolitan Statistical Area and 1970 Census of Population and Housing: Census Tracts, Boston, Massachusetts Standard Metropolitan Statistical Area.

black neighborhood of Roxbury. Also important is the elevated trolley line that cuts through Area C.

The decline in Area C is also obvious from the movement of the housing indicators. Housing values and rents have declined. Home-ownership has decreased and over-crowding has become more severe in one portion of Area C.

According to the BRA property value study, the severe downward trends in Area C are a foreshadowing of the pattern for the rest of Jamaica Plain.<sup>15</sup> In our investigation this conjecture may be supported by the rapid decline in Area B. On the other hand, the mass transit line and the hospital expansion proposed for the coming years may reverse this trend in the future, making the trends in Area A the potential model for the more blighted areas to its east.

Area C has the highest proportion of black residents in all of Jamaica Plain, yet still far below the level for the city of Boston. The largest proportion of Black residents live in the central portion of Area C which borders the predominantly black neighborhood of Roxbury. This section of Area C has also had a marked rise in Spanish-speaking people but not nearly so large as that found in the northernmost Hyde Square and Egleston Square portions of the subneighborhood. The minority residents of Area C are largely concentrated in the least desirable portions of the subneighborhood. Many live along the route of the Washington St. elevated trolley line. This section of Area C is marked by the blighting influence of the noise and the appearance of the trolley line that runs through it and the mixed residential and commercial land use that run along the route of the tracks.

Another very low income and largely minority section of Area C borders the Bromley-Heath public housing project. This was initially an all white project which over the years has become predominantly black, with the current trend being toward increasing numbers of both black and white female-headed households.<sup>16</sup> Residents and realtors in Jamaica Plain have all pointed to the negative impact the project has had on the surrounding residential area. The area around the project is believed to be dangerous. Property values have dropped in this area. The vacancies left by the fleeing white residents have been taken up by Spanish-speaking and black residents.

The one higher status portion of this subneighborhood is the Peter Parley Road Neighborhood which is slightly removed from the blighting forces of the unfinished highway and borders Franklin Park with its visual and recreational advantages. On the basis of census data, this area appears to be experiencing a rise in status. Like Moss Hill, this is a highly organized cohesive neighborhood. This may have added further protection from the downward forces impacting a large part of Jamaica Plain.

In Area C, we have found agreement among the various indicators of neighborhood change that relate to the residents of the neighborhood. There is also a marked relationship between the quality of the physical environment and the behavior of these indicators. In the areas bordering the old railroad tracks (proposed expressway route), population has decreased and the remaining residents are of a very low status. Similarly the area bordering the elevated only attracts the poorest people. In the case of Jamaica Plain, these people are primarily Spanish-speaking. The black residents who have moved into this area

since 1960 are of higher status than their Spanish-speaking neighbors. The areas with the largest concentration of minority and low income people also have the largest proportion of children and female-headed households. That portion of Hyde Square in Area C has the lowest proportion of elderly and the largest proportion of children in all of Jamaica Plain.

The decline in Area C is also noticeable when one studies the housing indicators. Along the route of the proposed Southwest Expressway, large numbers of buildings have been torn down. Many of those that remain are abandoned or in the hands of absentee-owners, interested in making a profit when the plans for the transit route along this path are complete. According to a 1971 Globe study, "between 1960 and 1968 an estimated 20 percent of the housing along the corridor moved from the sound category into either 'deteriorating' or 'dilapidated' condition."<sup>17</sup> The decline in the number of owner-occupied units has been greatest in this area and in Hyde Square. The exact number of units that have been removed from the housing stock as opposed to changing to rental tenure is not apparent from the census data. The area's decline in home-owners is, however, a mark of a neighborhood that has lost a large proportion of its most dedicated residents.

While the number of dwelling units has decreased by almost ten percent in the Hyde Square area and more than fifteen percent in the area just to the southeast of Hyde Square, the vacancy rate has risen in these areas from less than two percent to over five percent over the decade. Most of the vacancies are in the lowest end of the rental market. They are units that nobody wants. On the other hand, there was an increase in the number of units

in the southern portion of Area C and only a mild rise in vacancies, indicating that this is still a viable residential area.

In 1960, the median rent in Area C was comparable to that for the city, but by 1970, only the southernmost portion had kept up with the city's rising rents. Housing values in this area were far lower than those for the city in 1960 and remained quite low throughout the decade. The relative decline in housing values was greater than for rentals. This may be attributed to the unavailability of mortgages in this area and the fear of investing in such an unstable neighborhood. The BRA study of sale prices confirms these findings.

Once again, the minority residents were found to be paying the highest rentals. The black families were renting the largest units in the area. For them, Jamaica Plain may be a form of upward mobility in the housing market. The Spanish-speaking residents on the other hand were not renting the largest units, but were still paying higher rents than the non-minority population. Besides the obvious explanation of discrimination and premiums to property owners for renting to the lowest population strata, this may also be explained according to the principles of a "peasant economy."<sup>18</sup> The rent level in much of Jamaica Plain is below that for the city. In many cases, owners of two and three family homes rent apartments to their friends or members of their family. They have the security of good tenants and try to keep these tenants by charging lower rents. As this system breaks down with an increase in absentee-ownership, and a new population group, owners no longer have the same incentives and as a result raise the rent levels for their new tenants.

In 1960, overcrowding was more severe in Area C than in any other portion of Jamaica

Plain. In the Hyde Square section it became still more severe over the decade. A large proportion of the overcrowded households were Spanish-speaking. This is largely explained by their large median household size.

All the indicators of neighborhood change are pointing downward relative to Boston. In this case, income is falling most rapidly, followed by housing value then rent. Owner-occupancy is declining and over-crowding is becoming more severe. This is also the sub-area with the largest concentration of Spanish-speaking residents. As in Areas A and B, Area C is also not truly a homogeneous neighborhood. The Peter Parley Road Neighborhood is much higher status than the area surrounding it and rose in status over the decade. If it were excluded from the analysis, Area C would have appeared to have declined even more severely.

Once again, the importance of disaggregating seemingly similar areas is shown to be important. Area C is composed of a stable Irish area, a new Black area, and a new Spanish-speaking area. Each exhibits its own unique trends which when homogenized distort the actual neighborhood dynamics. In addition, rent levels were shown to be a deceptive indicator of neighborhood change. Rents were highest in those areas that were declining most rapidly in terms of population status and housing value.

## 6.4 FINDINGS

### Findings About Neighborhood Change

On the basis of the subareas of Jamaica Plain analyzed above, we found that the various

indicators of neighborhood change generally move in the same direction, but not at the same rate, or in a uniform sequence. This may be illustrated using the two most commonly applied indicators of neighborhood change; change in median income and change in median housing value. In Area A, income and housing value both rose relative to Boston, six percent and seven percent respectively. In Area B, however, income dropped by only two percent and value by twenty percent. Finally in Area C, income dropped by eighteen percent relative to Boston and value by only thirteen percent. Including, educational attainment or occupational status in the analysis was found to add conflicting information in upward transitional, Area A.

We did find, consistent with the theories of neighborhood change, that the more cohesive subareas, Moss Hill and Peter Parley Road, were most resistant to downward changes. In addition, areas containing high concentrations of Spanish-speaking people had the lowest socio-economic status. The small black enclave also exhibited a lower status than the white population.

Changes in rent were found to be a difficult indicator of neighborhood change to analyze in the absence of other data. The lowest income areas had a higher rent scale than the higher income areas in several instances, either because of discrimination, a shift from family owned and occupied structures to absentee ownership or because of unit size or a combination of these.

Although, from the above analysis of Jamaica Plain, this is not certain, we believe changes are initiated at the fringe of a neighborhood rather than at the core and it is the

influence of forces acting on the fringe that spread throughout the neighborhood. This was apparent in the area bordering the Bromley Heath public housing project.

History and geography also play dominant roles in neighborhood change. Those areas which were initially developed for industrial use or which bordered railroad tracks had the most severe decline. The lower density, more suburban areas declined more slowly. Finally, those areas bordering open space experienced the least decline. This was apparent in the case of both Moss Hill and the Peter Parley Road Neighborhood. These had the double advantages of cohesiveness and location. The positive influence of the location may have encouraged a sense of unity and a desire to maintain the neighborhoods' positive elements.

#### Methodological Findings

The disparities that were found in the direction of the movement of some of the indicators of change may be attributed to the lack of homogeneity in each of the subneighborhoods. Further investigation of other neighborhoods is required to further substantiate the contention that the indicators of change do move in the same direction in a homogeneous neighborhood. The location of the boundaries of a homogeneous neighborhood and the acquisition of a usable data base are the most critical difficulties involved in doing an analysis of neighborhood change.

As noted, because Jamaica Plain is so varied, homogeneous subareas within it were selected for analysis. During the course of the analysis, however, it became clear that the subareas were not in fact homogeneous. The individual tracts from which they were constructed have wide variations within them. These variations are lost in median tract figures. Homogenizing dissimilar areas distorts the behavior of the indicators. As noted



in Tract 1207, part of the tract is rising rapidly in status while another part is declining in status. The upward change dominated the other downward trend.

In addition, over the course of a decade, the boundaries of neighborhoods shift. Minority populations spread out over larger geographic areas. New housing changes the composition of an area's housing stock, thus creating a new subarea and shifting the old boundaries. Census tract boundaries are unchanging, primarily to allow one to analyze changes over time. However, analyzing changes in an area that is undergoing conflicting trends results in invalid and ambiguous findings.

The above comments are based on the assumption that one is studying "neighborhood" changes, that is changes occurring at the scale at which all the neighborhood boundaries coincide. Census tract data is not tabulated according to these neighborhoods. Although neighborhoods may be constructed out of census block data, only a limited amount of information, particularly data on housing is provided for each census block. This is to preserve the anonymity of the respondents. As a result, the neighborhood analyst is forced to use subareas that are not truly neighborhoods and is thus left with an inaccurate picture of the changes occurring within a neighborhood and without knowledge of the shifts in neighborhood boundaries that are so important to the dynamics of a city.

Neighborhood analysis may be conducted at a larger scale, such as the scale of Jamaica Plain itself, to determine the broad trends, but in doing this, one must be cogniscent of the distortions that are built into such an analysis.

The final problem unearthed in this analysis is the ten year intervals dictated by the

census. Shorter term trends are lost over a ten year period. Much the same way averaging over a census tract hides distinctions within the tract, looking at a ten year interval hides all the variations and fluctuations that occurred during the course of the decade that caused the area to look the way it does at the end of the decade. In addition, because data is provided for just two periods of time, it is quite difficult to determine benchmarks in an area's history. The analyst cannot determine what set of circumstances existed when a particular trend began nor can he determine exactly when the trend began.

In short, analysis of neighborhood change is dependent on the accurate location of the boundaries of reasonably homogeneous areas, the existence of data tabulated according to the geographic area to be studied, and information on when trends actually began. As noted in the first part of this study, not all portions of the city are in fact homogeneous, census data is tabulated according to rigidly established boundaries, and the census is only published at ten year intervals. Given these constraints, one must call into play other sources of data, such as observations, and interviews to pin down the actual location of specific trends and the timing of changes. In addition, we found that in less than homogeneous subareas, the indicators of neighborhood change do not always move in the same direction and the most dominant change hides more mild changes in other portions of the area. Therefore, reliance on just one or two indicators may provide the analyst with inaccurate data, leaving a large amount of latitude for different actors to label the trends in an area differently and thus prevent a uniform assessment and treatment of the area.

## Footnotes: Chapter 6

1. Interview with Jamaica Plain resident, March 26, 1974.
2. Conversations with planners at the BRA.
3. Many Cuban immigrants were forced to leave Cuba for political reasons, unlike the Puerto Rican immigrants who came to the United States primarily to raise their standard of living.
4. Interview with the manager of the Jamaica Plain Little City Hall, Summer, 1974.
5. J. Boland and R. Cady, "Housing Market Study - Jamaica Plain: (1952-55) - (1962 - 65)." Research Unit, Boston Redevelopment Authority, (mimeograph).
6. Interview with police officer, District 13, Summer, 1974.
7. Annual Report of the Business Manager to the School Committee of the City of Boston for Calendar Year 1959. School Document, No. 4-1960. Also for Calendar Year 1960, School Document, No. 10-1970.
8. Boston Redevelopment Authority, Jamaica Plain General Neighborhood Renewal Plan. Boston: BRA, Project No. Mass. R-49, June 24, 1965, p. 3-2.
9. Annual Report of the Business Manager to the School Committee, 1959, 1969.
10. These facts are based on observations and interviews.
11. Recently (October, 1974), a meeting was held in Jamaica Plain to discuss red-lining. People active in stopping red-lining in other cities participated in this city-wide conference.
12. Boston Globe, August 3, 1973, "Ways Sought to End Jamaica Plain Tensions."
13. Interview with the manager of the Jamaica Plain Little City Hall, Summer, 1974.
14. Interview with police officer, District 13, Summer, 1974.
15. Boland and Cady.

16. Joel Arnoff, Nathaniel Raymond, Arthur Warmoth, The Kennedy-Jefferson School District: A Report of a Neighborhood Study in Progress. (Cambridge: Harvard University, June, 1965) pp. 15-16.
17. Boston Globe, August 23, 1971, "Boston's Neighborhood's-4: Jamaica Plain's People and Their Problems."
18. For a discussion of the peasant economy in which mutual support and social ties are the dominating force as opposed to the capital market see: Roger Krohn and E. Berkeley Fleming, The Other Economy and The Urban Housing Problem: A Study of Older Rental Neighborhoods in Montreal. Cambridge: Joint Center for Urban Studies of the Massachusetts Institute of Technology and Harvard University, Working Paper, No. 11).

## Chapter 7: Summary and Conclusions

The first portion of this study addressed itself to the concept of neighborhood. We began our discussion of neighborhoods with the conceptual framework established in the sociological, demographic, economic, and planning literature. We then turned to operational notions of neighborhood to determine whether the various neighborhood definitions refer to the same spatial unit.

In the second half of this study, dealing with neighborhood change, the concepts developed in the literature were again made operational in order to determine whether the separate indicators point toward a single process of change.

The purpose of this analysis was to determine how one may use the vast amount of literature on neighborhoods and neighborhood change to construct a methodology for neighborhood analysis. For this, it was important to identify the sources of data available and to identify the strengths and limitations of the existing indicators, data sources and monitoring possibilities.

As noted at the outset of this study, the question of whether neighborhood boundaries are uniquely defined, whether all indicators of neighborhood change move in the same direction, rate and pattern, and finally whether there is sufficiently disaggregated data available to conduct a neighborhood analysis were all considered important because many public and private actors constantly make decisions based on neighborhoods and neighborhood change in their daily lives and in their professional roles.

The boundaries selected by each of the municipal regulatory, planning, and service delivery departments determines the way each area in the city is treated and the resources it receives. In addition, each public actor's evaluations of the changes occurring in a subarea of the city determines the amount and type of preventive and corrective intervention to be prescribed for that area. The boundaries bankers put around high risk areas have important implications for the residents of the area and others interested in buying a home.

In this concluding chapter, we shall review the analysis conducted and the resultant findings. We shall then surface those methodological issues found to be most critical in conducting a neighborhood analysis.

In order to clarify how neighborhood boundaries may be established and to understand the behavior of indicators of neighborhood change, we conducted a detailed case study of a popularly recognized Boston neighborhood. As noted earlier, the Jamaica Plain neighborhood of Boston was selected because it is neither clearly homogeneous in its population composition, nor is its population highly heterogeneous; it is not geographically discrete; nor is it undergoing rapid changes. It was, rather a neighborhood at the midpoint between each of these extremes.

We began Part I of our analysis with a typology of neighborhood definitions, based on the three elements of a neighborhood: the people, the housing, the environment. Within the context of this typology, the concepts of neighborhood posited by scholars in various disciplines were reviewed. We then operationalized each definition,

to enable ourselves to locate neighborhood boundaries in keeping with each notion of neighborhood. Several of the operational neighborhood definitions were then applied to Jamaica Plain, the case study area, to determine whether the boundaries dictated by various definitions all coincide.

In the second part of our analysis, we reviewed the scholarly literature dealing with neighborhood change and identified the major indicators of neighborhood change. We then examined a set of indicators of neighborhood change in subareas of Jamaica Plain to determine whether the various indicators move in a single direction, at the same rate, and in a clear sequential pattern.

On the basis of Part I, Jamaica Plain was found to be primarily an administrative and historical construct. It does not qualify as a cohesive or homogeneous neighborhood; nor is it a housing submarket. Jamaica Plain only qualifies as a neighborhood in terms of its physical boundaries. At a scale smaller than the historically defined neighborhood, the major definitions refer to roughly the same geographic area. Finally, history and the physical environment were found to have an important influence on the boundaries of neighborhoods.

In Part II, we learned that within the subareas of Jamaica Plain, the indicators of neighborhood change do generally move in the same direction but not at a uniform rate with respect to the changes occurring in Boston as a whole. Our analysis also did not provide a basis to determine whether there is a lead indicator nor whether there is a fixed sequence to the changes in the various indicators. We did find that highly organized

cohesive neighborhoods and neighborhoods bordering open space are least prone to decline, while neighborhoods containing or bordering blighting forces such as commercial areas, railroad tracks, industry, or a lower-income area were most prone to decline. Again, history and geography were found to play a critical role in a neighborhood's dynamics.

Inherent in all case studies, is the question of whether one may generalize from the findings based on a single case. Put another way, it must be determined whether our findings would differ if a different case were selected and if so in what ways. Let us now briefly look at the potential findings of this analysis if an area that has a more homogeneous population than Jamaica Plain were selected and then the results if a more heterogeneous area were selected.

Subareas having a more highly homogeneous population than Jamaica Plain may be regarded as neighborhoods rather than just visual or administrative districts. Subareas based on more fine-grained distinctions may, however, be located within such homogeneous neighborhoods. In Boston, examples of more highly homogeneous neighborhoods are Charlestown, South Boston, and the North End. In cases such as these, the historical neighborhood developed as a single unit and maintained the homogeneity which makes it a single neighborhood as well as a police district, fire district, and aggregation of statistically quite similar census tracts.

The indicators of neighborhood change were found to move in the same direction in the subareas of Jamaica Plain, but not in Jamaica Plain as a whole. We believe this is largely because the subareas analyzed were relatively homogeneous, while Jamaica



Plain as a whole has a wide variation in the characteristics of its population. In a larger homogeneous neighborhood such as those named above, the distortion in the indicators would not be nearly as severe as in an analysis of Jamaica Plain. One may then analyze the indicators of change for the neighborhood as a whole in the case of a more homogeneous neighborhood.

In most cases, the homogeneity in population is a function of history and is reinforced over time by the characteristics of the housing stock and neighborhood institutions. When changes do occur in such a neighborhood, all aspects of the neighborhood will probably also move in the direction of the change. If the change is introduced in just one section of the neighborhood, either through public action or through other outside influences, the neighborhood will no longer be homogeneous. Perhaps over time, the entire neighborhood may follow the trends of the divergent subarea, but in the short run, the area will no longer be regarded as homogeneous.

In short, if a neighborhood with a more homogeneous population were selected for the analysis, all the definitions would have reinforced each other at the scale of the neighborhood under analysis. The homogeneity would in turn render the entire area an appropriate unit of analysis for monitoring neighborhood change.

A more heterogeneous neighborhood is far more difficult to describe and analyze than a more homogeneous neighborhood. The more heterogeneous the neighborhood is, the smaller will be the subareas of homogeneous population and housing stock. In the most extreme case, diverse types of people may share the same block. In Boston, the

South End and Allston-Brighton may be regarded as heterogeneous neighborhoods. If we had selected such a neighborhood for our exploratory analysis, the fine-grained diversity would have made finding subareas quite difficult. In addition, the indicators of neighborhood change would have been difficult to analyze because varying trends would be interspersed in a small geographic area. Although such neighborhoods are less common than both homogeneous neighborhoods and neighborhoods like Jamaica Plain with clusters of similar types of people, they do exist in most older cities and a methodology must be developed so that they can be appropriately analyzed and treated by municipal agencies and others who use the neighborhood as a unit of analysis.

To further validate our main findings, one would have to carry out a similar analysis on neighborhoods at other positions along the spectrum from homogeneous to heterogeneous, as well as on neighborhoods that are both more and less visually discrete, and on neighborhoods that are more and less stable.

Several major methodological difficulties were identified both in locating neighborhood boundaries and in measuring neighborhood change. In both cases, the most critical problem was data limitations. The decennial census is the most important source of data on population and housing characteristics, but census tracts do not generally constitute a neighborhood on the basis of any of the commonly accepted criteria of a neighborhood. Since census tracts are not necessarily homogeneous, indices based on aggregations of census tracts do not always relate to truly homogeneous neighborhoods. This leads to further difficulties in the application of the indicators of neighborhood change. If the

subarea analyzed is not homogeneous, the trends occurring in the area may counteract each other, resulting in a distorted view of the dynamics of the area.

Along with limiting the geographic area one may analyze, the use of census tracts limits the analysis of neighborhood change to comparisons of the same area over ten year intervals. This hides the actual time that the changes occurred and does not allow one to trace the actual movements of population groups into and out of the neighborhood. It only provides an aggregate, static picture. This makes a study of population mobility and filtering quite difficult.

The Boston SMSA established the policy of maintaining uniform tract boundaries over time. This allows comparisons of the same area over time, but hides changes in neighborhood boundaries. As a result, dissimilar people and housing are aggregated when they more appropriately belong in a different tract. This again adds further difficulty to both locating neighborhood boundaries and monitoring neighborhood change.

As discovered in Part I, the commonly agreed upon neighborhoods or districts of a city are not necessarily neighborhoods in terms of the formal definitions of the term. In addition, the various city agencies do not all subdivide the city in the same way. This means that many actors collect data and draw conclusions on divergent geographic districts, making the coordination of activities and sharing of data difficult.

Another critical difficulty which has been ignored by neighborhood scholars is an operational notion of homogeneity. This is an important concept in both locating neighborhood boundaries and in analyzing neighborhood change. If a majority is necessary for

an area to be recognized as homogeneous, perhaps the resultant geographic areas would be too small to be useful. We believe that the level of homogeneity used must be tailored to the needs of each investigator and the exact level being used made explicit. Again the census limits the analyst to aggregations of predefined geographic areas.

A similar question emerges in the case of neighborhood change. How much change is necessary for the neighborhood to be regarded as declining or upward transitional? Does the amount of change that is significant differ with each variable? Can the educational attainment of the population decline by 10 percent and the neighborhood be regarded as stable, while if the income level of the population declines by 5 percent the neighborhood be regarded as declining? Does this differ with the level at which the neighborhood is initially? For a discussion of neighborhood change to be interpreted similarly by all concerned, these questions must be answered.

Finally, because neighborhood change generally has its origin outside the neighborhood itself, it is a very difficult phenomenon to isolate and describe. As a result, indicators are commonly used as proxies for the process. For the indicators to provide accurate data, they must be monitored in an area where the entire population or housing stock is changing uniformly or else divergent trends will counteract each other and leave the analyst with an inaccurate picture of the changes occurring in the area. Finding the correct geographic unit for studying neighborhood change is a very difficult task. The best approximation found in this study was the intersection of the areas circumscribed by the various neighborhood definitions. Again, however, one must compromise and

use the aggregation of census tracts that most nearly meet the neighborhood boundaries. This also leaves unanswered the question of how to analyze the changes occurring in "non-neighborhoods" -- those areas with neither a homogeneous population, a homogeneous housing stock, nor a unifying environment.

Although neighborhood analysis is a very important activity for many people, a rigorous methodology for conducting such an analysis has not yet been developed. Most important, the necessary data is not available in a useful form and several key concepts have not yet been adequately defined. Over the next several years, with the growing trend toward local autonomy and decentralization of decision-making and planning, further strides must be made toward developing a methodology for locating neighborhoods and analyzing the changes occurring within them.

### Appendix A

#### Summary: Seven Levels of Housing and Associated Levels of Living

<u>Levels of Housing: Prototypes and Estimated Percent Distribution (Greater Boston, 1970-71)</u>	<u>Associated Market Values and Rentals (Late Spring 1971)</u>	<u>Who Lives There? -- Seven Socio-Economic Status Groups, or Levels of Living, Associated with Each Level of Housing</u>
<p><b>PRESTIGE CLASS HOUSING --</b> "estates," "mansions," "luxury spreads in suburbia," "fancy townhouses," and "elegant penthouses." Estimated as 1.6% of Boston area housing stock.</p>	<p>\$70,000 and up for single-family houses Rents: \$585 or more unfurnished</p>	<p><b>THE SUCCESS ELITE --</b> professionals, politicians, executives, businessmen "making at least \$35,000 a year" -- on up to <b>THE REALLY, REALLY WEALTHY.</b></p>
<p><b>VERY GOOD HOUSING --</b> eight-room colonial in top condition or "custom contemporary;" this level is far above the common man's dreams. Estimated as 4.9% of Boston area housing stock.</p>	<p>\$42,000 up to \$69,900 for single-family houses Rents: \$375 to \$584 gross unfurnished</p>	<p><b>THE ESTABLISHED UPPER-MIDDLE CLASS --</b> professional and managerial families, usually with college degrees (both husband and wife), who have attained an income in the range from \$22,400 up to \$34,900.</p>
<p><b>PLEASANTLY GOOD HOUSING --</b> seven-room Cape, split-level, or ranch; this is "definitely above standard," but within the range of the common man's aspirations. Estimated as 15.1% of Boston area housing stock.</p>	<p>\$28,000 up to \$41,900 for single-family houses Rents: \$240 to \$374 gross unfurnished</p>	<p><b>PEOPLE LEADING A "GOOD LIFE" --</b> found in a wide variety of occupations, from the professions down to top-pay blue-collar workers; significant share of two-income families. Income range is \$14,500-\$22,400.</p>
<p><b>STANDARD-COMFORTABLE --</b> six-room post-war tract house or pre-war Cape; other bungalows, or story-and-half houses; a home deemed satisfactorily comfortable to 4-person family. Predominantly single-family and owner-occupied. Estimated at 25.4% of Boston area housing.</p>	<p>\$20,000 up to \$27,900 for single-family houses Rents: \$182.50 to \$239 gross, but as low as \$160 contract (Image: \$160 to \$225)</p>	<p><b>"COMFORTABLE" LIVING --</b> Composed of middle-income white-collar workers and better paid blue-collar workers and many two-income families. Income range is \$11,000 to \$14,400.</p>

Levels of Housing: Prototypes and Estimated Percent Distribution (Greater Boston, 1970-71)

**STANDARD-MARGINAL** -- below average in desirability as result of age or being "smaller than you'd want," but not substandard in structural condition; predominantly rental, multi-unit structures. Estimated at 26.9% of Boston area housing.

**SUBSTANDARD** -- "Projects" and older housing with endemic deficiencies of condition -- "below inspection standards but not true slum;" still rehabilitable. Estimated as 21.5% of Boston area housing.

**SLUM** -- already abandoned or "should be;" stigmata are "broken windows," "rats scurrying around," "trash & garbage in the streets," "ragged children," "unemployed men," apathetic tenants not caring. Estimated at 4.6% of Boston area housing.

Associated Market Values and Rentals (Late Spring 1971)

\$12,750 up to \$19,900 for single-family houses

Rents: \$137.50 to \$180 gross, but as low as \$105 contract (Image: \$135 to \$159 for five rooms)

Market value moot for single-family houses

Rents: \$85 to \$135 gross for private housing, less for public: as low as \$55 contract (Image: \$110 to \$134 for four rooms)

Monthly rentals run below \$85 except in special cases of "exploitable" tenantry (Image: \$95 on up -- "more than it's worth")

Who Lives There? -- Seven Socio-Economic Status Groups, or Levels of Living, Associated with Each Level of Housing

**FAMILIES "JUST AVERAGE," OR WITH JUST "ENOUGH TO GET ALONG"**-- This latter is a phrase adopted from the Gallup Poll: it parallels the B.L.S. concept of families at "the lower living standard." Income range is \$7,500 to \$10,900.

**FAMILIES ABOVE "THE POVERTY LINE"** -- but without enough income to "get along" in a manner defined by most Bostonians as satisfactory. Income range is \$4,500 to \$7,400.

**PEOPLE LIVING BELOW "THE POVERTY LINE"** -- For a family of four this would be with annual incomes below \$4,500 as judged by Bostonians.

Source: Coleman, Richard Patrick, Seven Levels of Housing: An Exploration in Public Imagery. Cambridge: Joint Center for Urban Studies of the Massachusetts Institute of Technology and Harvard University, Working Paper No. 20, April, 1973.

## Appendix B

### Jamaica Plain as Defined by the City of Boston

Besides our concern with determining the level of overlap or conflict among the boundaries defined by each neighborhood definition, we are also interested in determining the extent to which the city relies on the existing theories of neighborhood in setting its district boundaries. The fact that Jamaica Plain is considered a neighborhood by the city of Boston is critical in that this then means that Jamaica Plain, with its varied population and housing, is treated as a single neighborhood for the delivery of services, for planning, and for complaint processing. The way in which the administering agency services a particular district largely influences the quality of life in the entire district and differentially impacts those portions of the district which differ from each other. In addition, although there is a subarea of Boston known as Jamaica Plain the actual boundaries used by each agency as we shall see vary with the administrative needs of each agency, further undermining the notion that Jamaica Plain is a uniquely defined neighborhood. Those districts which we shall discuss are the Jamaica Plain: fire district, police district, sanitation area, highway district, planning district, special purpose districts and jurisdiction for a little city hall.

In many cases, the boundaries for the service delivery district were set years ago according to criteria that have long since been forgotten but because crews, equipment, and funds have been allocated according to these boundaries they have not been changed.

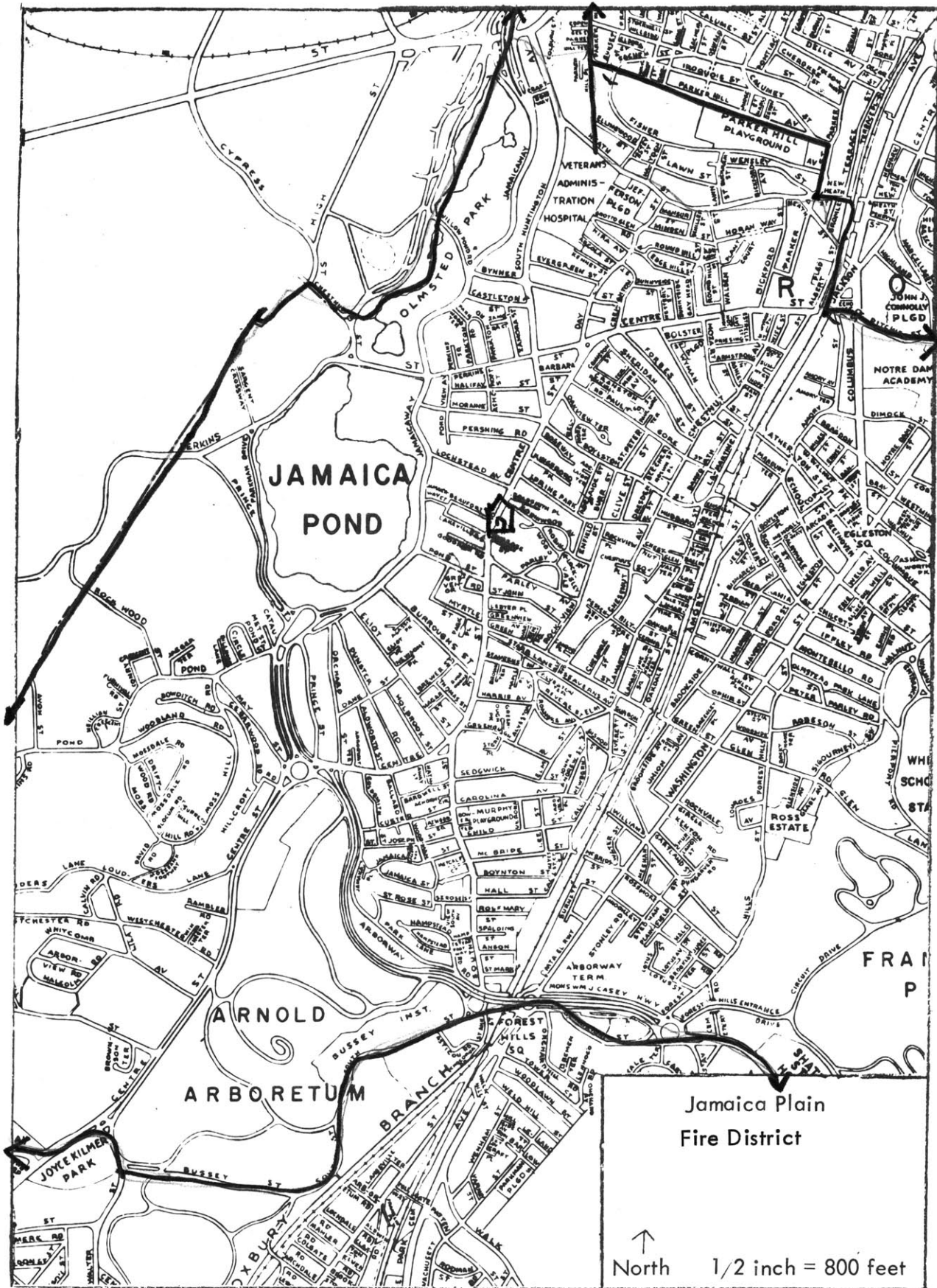


The current supervisors take their districts as given and perform their duties within their assigned boundaries. Let us now discuss each of the above districts in turn.

As a rule, fire stations are located in such a way as to minimize the response time to all areas of the city. In Jamaica Plain, all destinations may be reached within three minutes. The fire district boundaries, however, have their origin in the historic boundaries of Boston's neighborhoods and have changed only slightly over time as areas have been torn down or built up, as the population patterns have changed, and as the highway and street system has changed (map B.1).<sup>3</sup> These boundary changes have occurred in small increments over very long periods of time. It would be very difficult to document the boundary changes for the Jamaica Plain fire district to determine the forces to which the boundaries have had to respond.

Fire district boundaries are not the sole determinant of how an area is serviced, rather each alarm is serviced by the nearest fire equipment, which in many cases is located in a different district. Jamaica Plain is District 9, but the northern areas are serviced by District 4 in Roxbury. The fire districts are primarily administrative entities. They are the headquarters for equipment and records. The efficiency with which the district is run influences the level of services delivered, but the entire system of surrounding districts also plays an important role.

The police district headquarters serve a similar function as in the case of fire districts. The station is used for administrative purposes, to serve the public, and for storing equipment. Calls are assigned by a central office to the nearest car in the

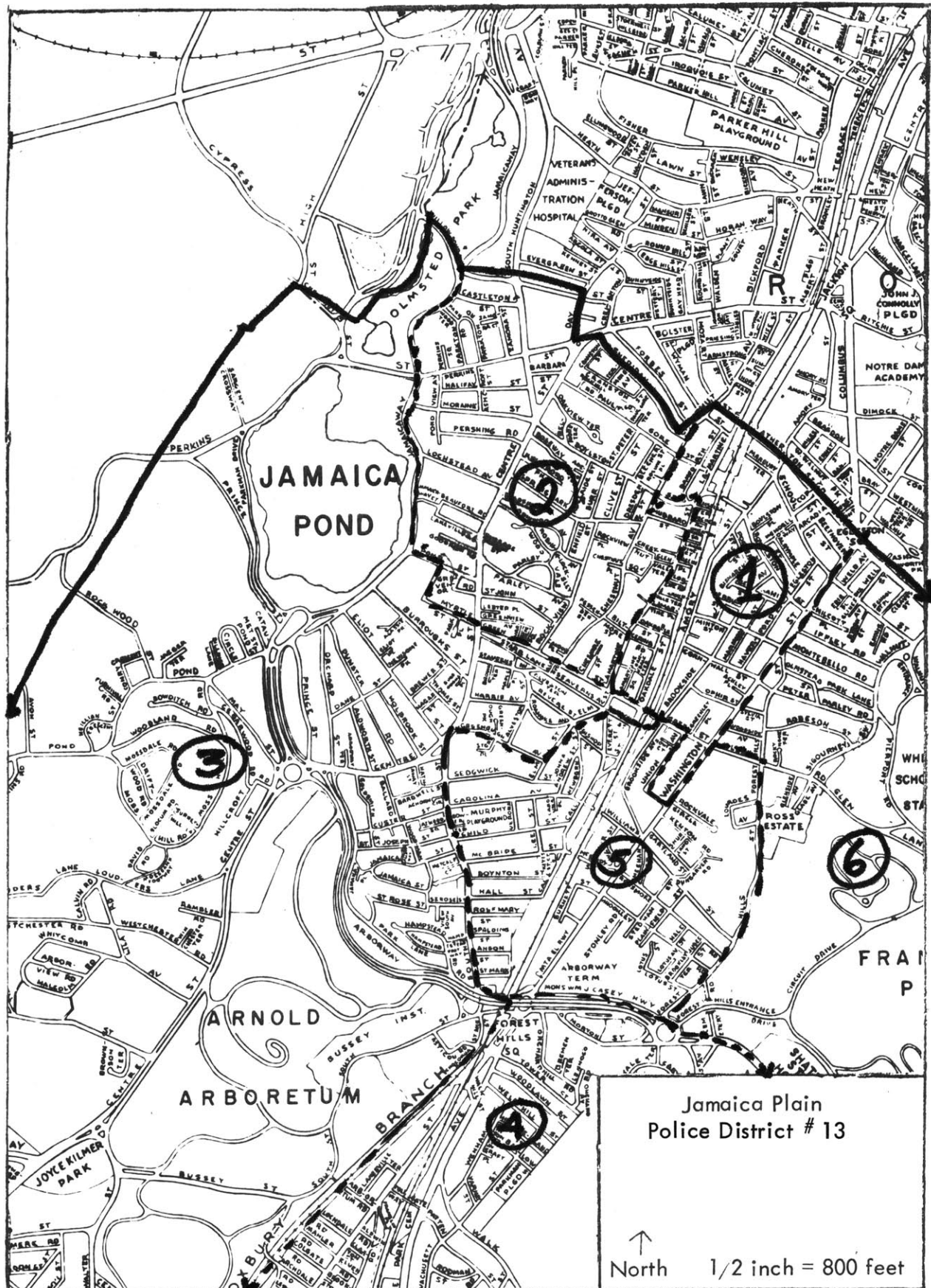


Map # B.1

Source: Boston Redevelopment Authority Map # D-36

in the sector (subsection of a district) needing help. Cars are allocated to the sectors on the basis of the work load. Unlike the fire department, which shifts its district boundaries to meet changing demand, the police department, merely allocates more or less cars as needed, maintaining their original boundaries. When Jamaica Plain was annexed to Boston in 1873, it had its own police department. After annexation, the Jamaica Plain police department was amalgamated into the Boston Police maintaining its own district boundary line (map B. 2).<sup>3</sup> In the 1950's, an efficiency survey was conducted that suggested cutting down the number of police districts in Boston from sixteen to four. This received large amounts of public protest. As a result, very few districts were combined as suggested. Even though police protection is based on the allocation of the cars in the sectors, residents prefer having a headquarters nearby. The current trend, and the one under which Mayor White ran for office, is that each neighborhood should have a say in the way city services are run, thus the need for visibility at the neighborhood level.<sup>4</sup>

The boundary lines of the fire district and police district centered on Jamaica Plain are slightly different. Although a police car must respond to all fire calls, the boundary differences are not a problem. Calls come into a central number (911) and both services are dispatched according to the nearest available equipment in each case. It appears then, that these district boundaries have very little importance in terms of emergency service delivery. Their main value is as a base for record keeping, equipment storage, and public visibility. Because Boston grew through annexing neighborhoods,



Map # B.2

Source: Boston Redevelopment Authority Map # D-36

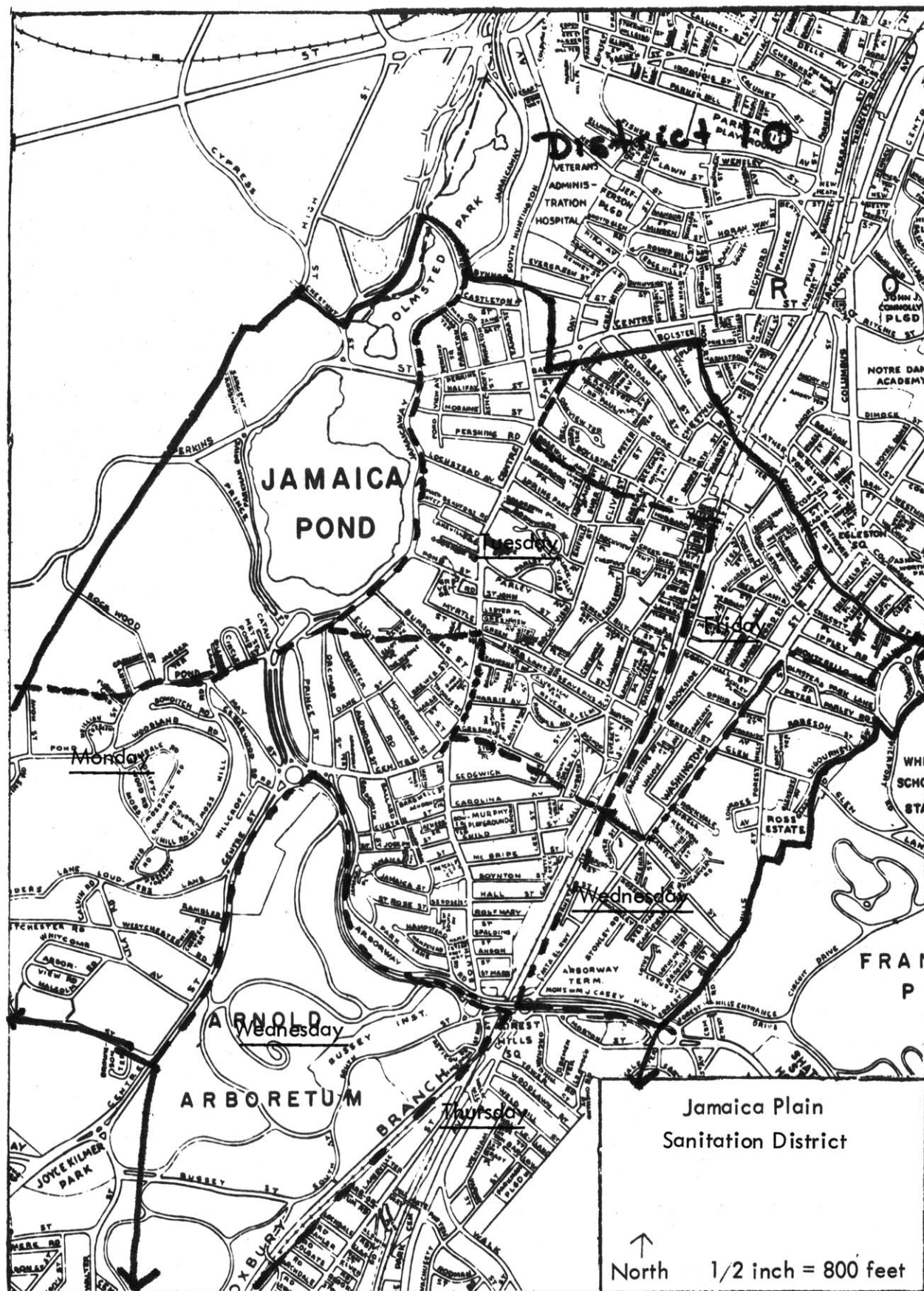
the service districts have more of a neighborhood identity than in many other cities. Although it is not discernable from the available data, perhaps this strong, historically based neighborhood identity causes each headquarters to be more responsive to residents' demands than would ordinarily be the case.

The Department of Public Works (DPW) has four separate divisions, each with its own method of subdividing the city. These divisions are sanitation, highways, engineering and water and sewer. We shall only discuss the first two, sanitation and highways, because these have the most visible impact on the neighborhood environment.

The city of Boston is divided into three sanitation areas. Sanitation services are provided by private contractors who are supervised by city employees (map B.3). The Sanitation Division areas are necessary because the entire city is too large to be adequately serviced by a single contractor. Without precise boundaries between the territories allocated to each contractor, the work they performed could not be adequately supervised. In establishing the sanitation area boundaries, the historical boundaries of Jamaica Plain were ignored and the neighborhood was split apart. Most of Jamaica Plain is in Area 2 which also takes in Hyde Park, West Roxbury, and Roslindale, the more suburban areas of Boston. The northern portion of Jamaica Plain is in Area 1. The origin of the boundary lines has long since been forgotten. The current supervisor of Area 2 does, however, feel that his district is manageable as laid-out and had no suggestions for redistricting.<sup>5</sup>

The level of service provided to a household by the Sanitation Division is dependent





Map # B.3

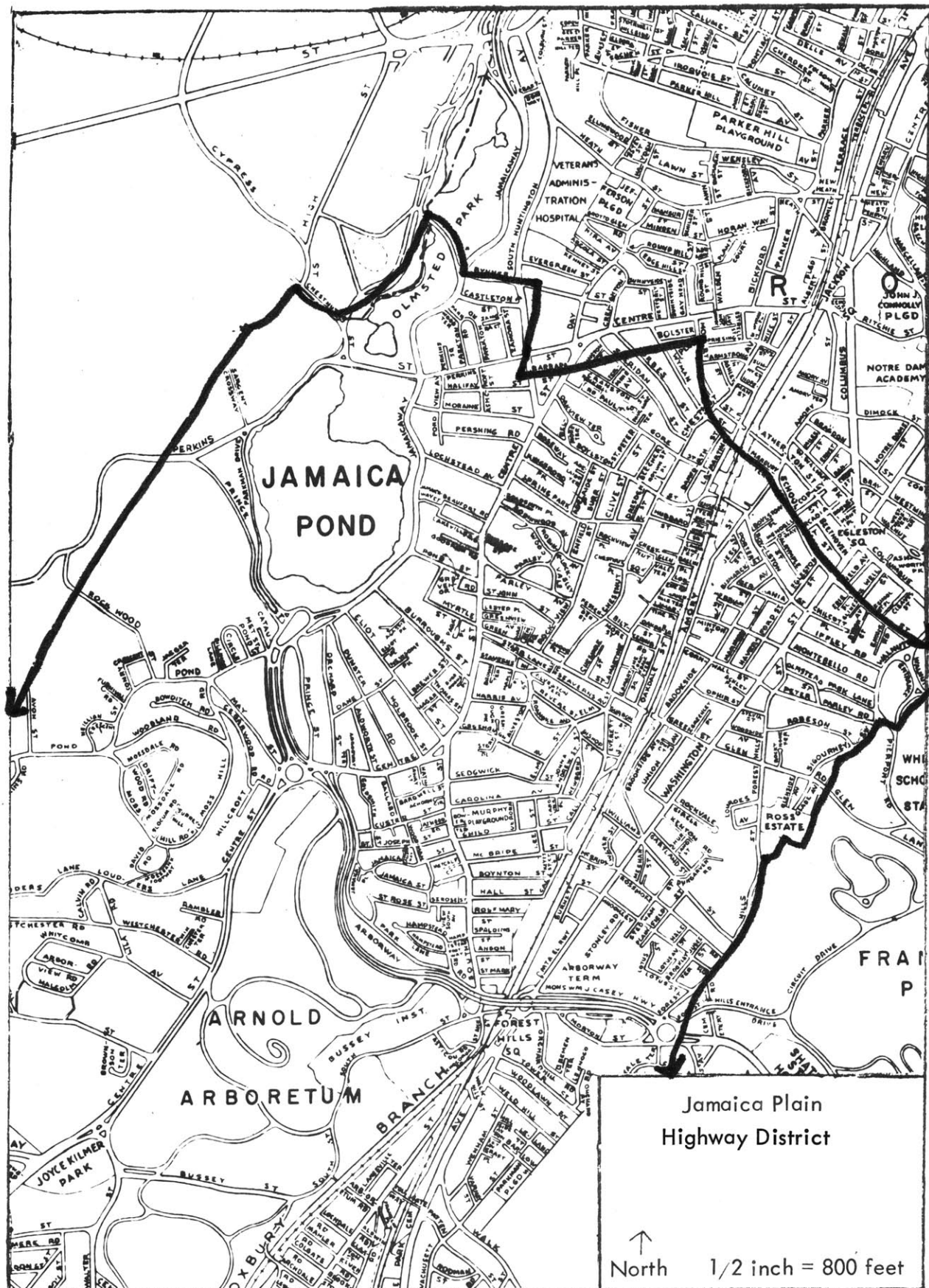
Source: Boston Redevelopment Authority Map # D-36

on two elements. First, it is dependent on the service area in which that household lives and the contractor assigned to that area. Second, the number of collections received by that household depends on population density and access to a place to store the trash between pick-ups. Most of the structures in Jamaica Plain have backyards or basements which can be used for storing trash between weekly pickups. More densely populated areas with inhabited basements have their trash collected up to three times a week.

The fact that Jamaica Plain is not considered as a unit by the Sanitation Division, is a potential source of inequitable treatment between two sections of a traditional neighborhood. The small number of residents in the northern section are serviced with inner city areas while most of Jamaica Plain is serviced with the more suburban sections of Boston.

The function of the Highway Division of the Department of Public Works is to repair and clean the city's streets and sidewalks. The Highway Division has ten service districts which again do not match the historical neighborhood boundaries of the Police Department (map B.4). The northern boundary of District 2, which serves most of Jamaica Plain is the same as that for Area 2 of the Sanitation Division. The northern section of what is traditionally known as Jamaica Plain is again grouped with Roxbury. The supervisor of District 2 did not know the origin or the rationale for establishing the boundaries as they are. He works within the framework handed down to him.<sup>6</sup>

The work of these two DPW divisions must be coordinated. The Highway Division cleans the streets the day after the Sanitation Division makes its collections. If the boundaries of the two service areas did not match at all, these two functions would be



Map # B.4

Source: Boston Redevelopment Authority Map # D-36



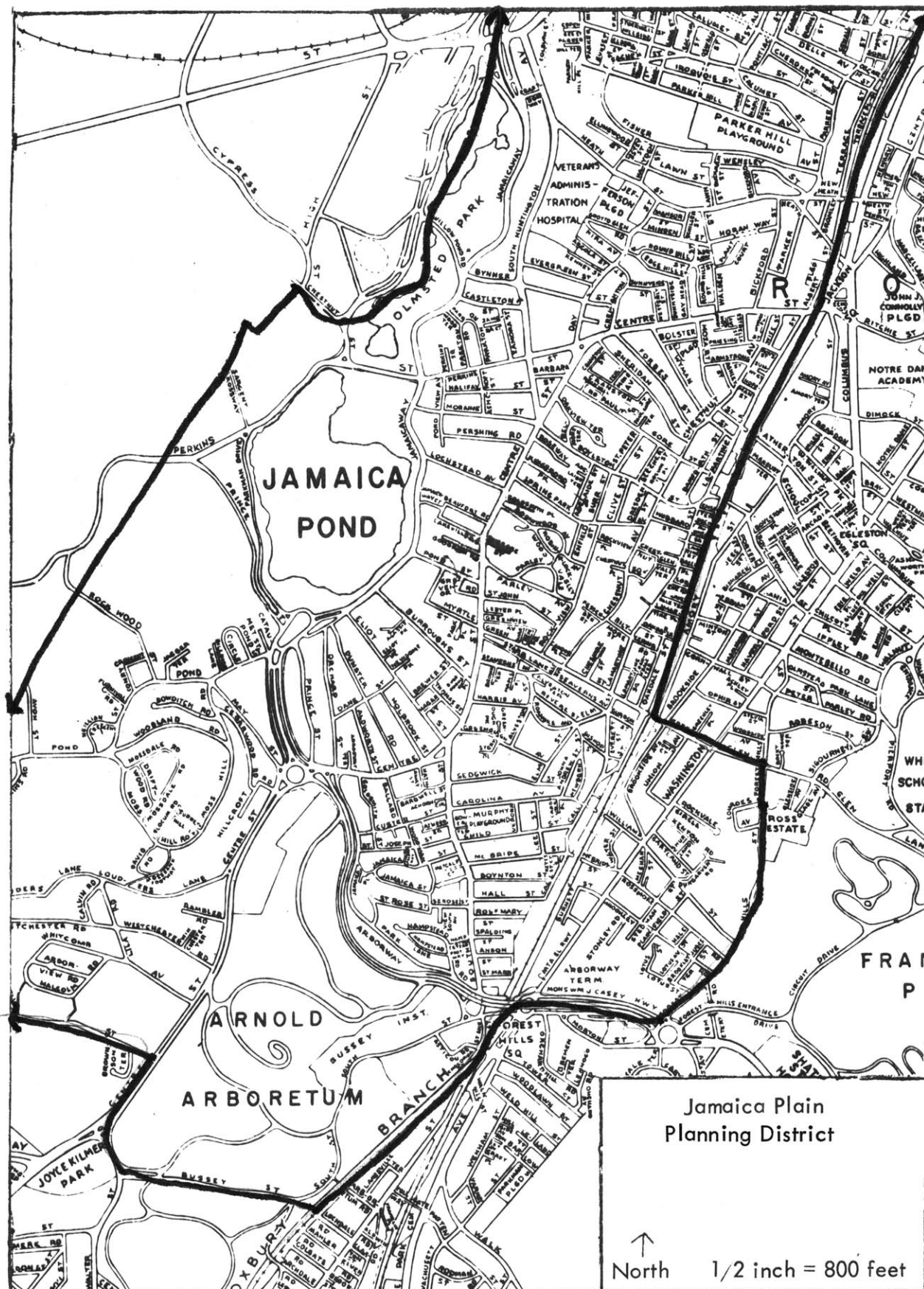
difficult to coordinate.

So far, we have seen Jamaica Plain as defined for the delivery of four different services. In each case, the boundaries were set in the distant past, in two cases according to the original town boundaries and in two cases according to criteria long since forgotten and now regarded as arbitrary. In the case of the fire and police most of the resource planning and allocation of emergency equipment is done centrally and decentralization is more illusory than real in terms of service delivery. But, because Boston is a neighborhood-oriented city, the value of the appearance of decentralization of services is quite important to the public. The maintenance of historical boundaries for this decentralization reinforces the sense of neighborhood autonomy. The DPW divisions are more decentralized in practice. The purpose of these districts is for crew, and equipment allocation and for supervisory purposes. The management capabilities of the supervisory staff may strongly affect the quality of services provided. In the case of Jamaica Plain, however, the historical neighborhood boundaries were not respected, allowing for possible inequitable treatment between two areas of the same neighborhood. This further illustrates the illusiveness of neighborhood boundaries and the potential importance of the way in which neighborhoods are defined by city agencies.

For the neighborhood analyst, the lack of uniformity among service delivery districts makes an in depth study of the level of services provided to the study neighborhood quite difficult. The figures that do exist are for an area other than that which is being studied. If the historical boundaries of Jamaica Plain are selected as the unit of analysis, then figures and data from each of the city agencies will not exactly match

the area being studied. In addition, the census tract boundaries that form Jamaica Plain do not match any of the districts just discussed, making per capita estimates quite difficult. This also precludes correlating demographic data with service delivery data. Census tracts instead, match Boston's Health and Welfare Areas which were established in the late 1930's. This allowed for careful study of medical issues on a neighborhood basis.

This lack of clarity as to the most correct boundaries to be used for neighborhood analysis and planning was faced recently by the Boston Redevelopment Authority (BRA), the planning and renewal agency for the city of Boston. Several years ago, the BRA divided Boston into neighborhood planning districts each under the auspices of a district planner and his staff. Jamaica Plain was grouped together with the Parker Hill area to the north, to form the Jamaica Plain-Parker Hill Planning District (map B.5). Once again the historical boundaries of Jamaica Plain were ignored. The census tract boundaries were also ignored. Instead the BRA delineated the district using physical boundaries such as parks and highways. The use of physical boundaries is in keeping with traditional city planning which dealt mainly with planning the physical environment. The BRA is currently becoming more involved with social planning and policy issues which involve greater consideration of the social elements of a neighborhood and perhaps a rethinking of appropriate district boundaries. Areas for which planning was being carried out by another agency were also left out of the planning district further negating the importance of historical boundaries. Model Cities Area 1 is traditionally in Jamaica Plain, but because it is treated under a special program, Area 1 is in the Washington Park-Model



Map # B.5

Source: Boston Redevelopment Authority Map # D-36

### Cities Planning District.

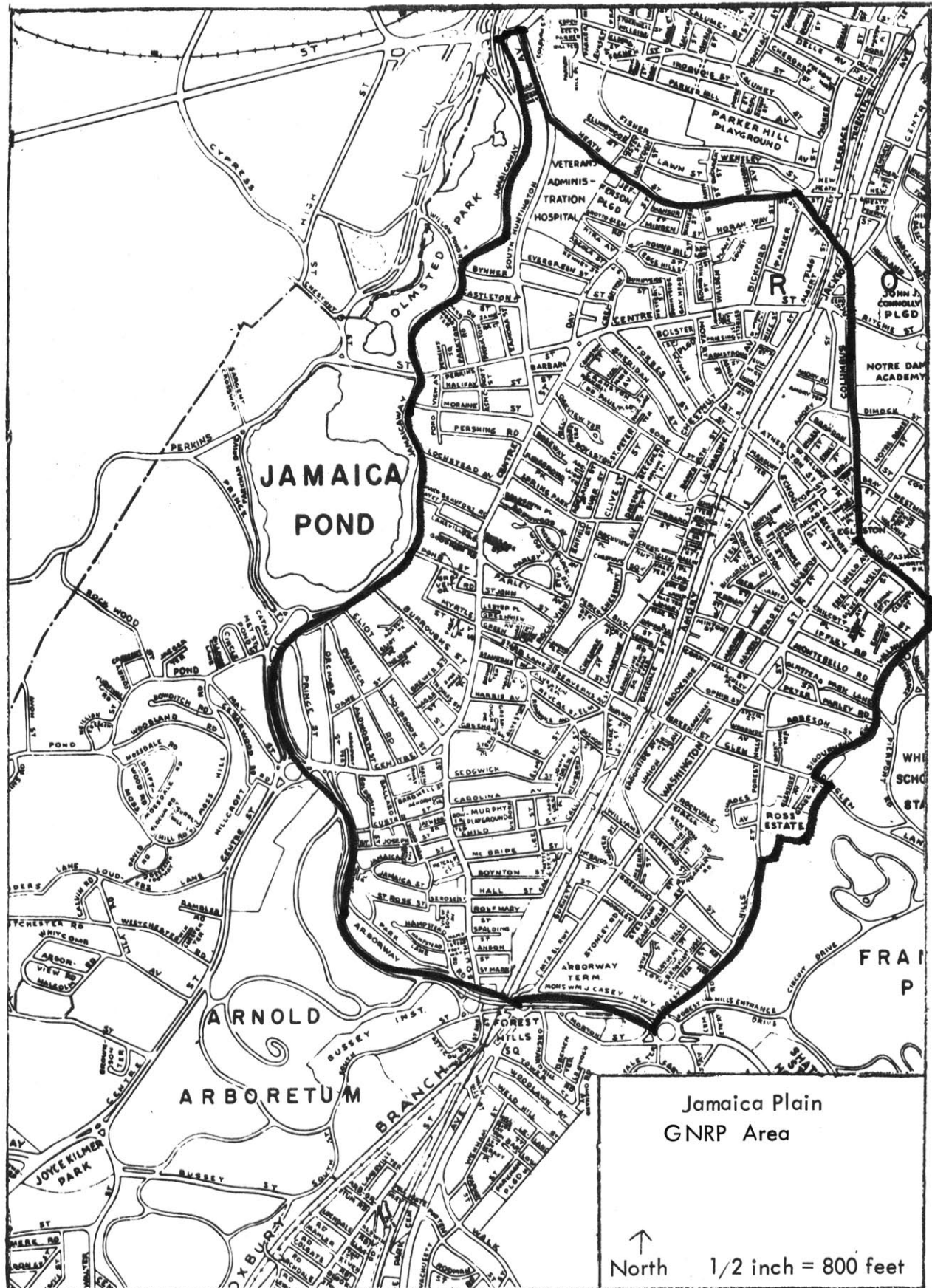
In subdividing the city into neighborhood planning districts, the BRA was recognizing the fact that different areas of the city and different groups of people have different needs. However, as we found, Jamaica Plain does not in fact contain one single interest group but instead a variety of geographically scattered subgroups.

The BRA's original function was to administer Urban Renewal projects. In the early 1960's, General Neighborhood Renewal Plan areas (GNRPs) were established as the units within which Urban Renewal Planning was to be carried out. As indicated on Map B.6, the section of Jamaica Plain bordering Brookline quite appropriately was not included in the GNP area. In a BRA report dated January, 1965, the selection and treatment of these boundaries for the GNP area was justified:

The studies undertaken during the preparation of the General Neighborhood Renewal Plan indicate the feasibility of one prospective Title I project, covering the entire Jamaica Plain area. This decision is based on the historical unity associated with Jamaica Plain, the complete inter-relationship of land use and circulation, and the limited amount of clearance proposed.<sup>7</sup>

In this statement, the western region is not considered as being left out, but rather as not even being part of Jamaica Plain. In that same report, it was explained that if a new school were considered necessary, it would be placed in the southern part of the area requiring an extension of the GNP area. It becomes doubtful just how important the historical unity of the area really was in the planning process.

Because the BRA was concerned with neighborhood conservation, they appropriately only selected that section of Jamaica Plain requiring their services. Justifying their



Map # B.6

Source: Boston Redevelopment Authority Map # D-36

selection with references to "historical unity," is an inaccurate justification for the way in which the neighborhood was defined. The fact that all of Jamaica Plain was not included in the GNRP is not obvious from the verbiage in the Urban Renewal reports. It instead required a close look at a map.

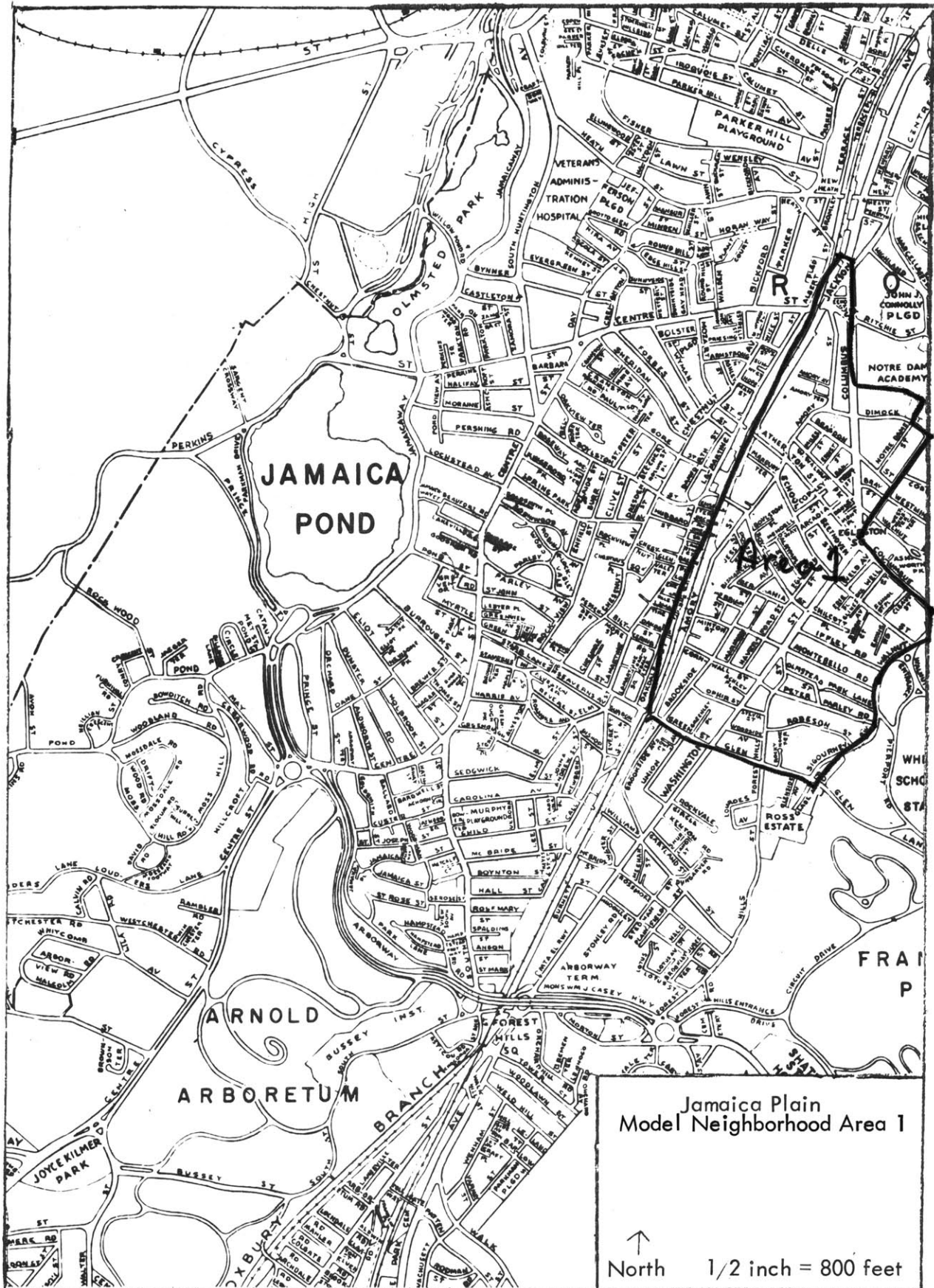
Action for Boston Community Development (ABCD), Boston's anti-poverty agency, borrowed its district boundaries from the BRA.

ABCD, when it first began to receive funds from OEO, recognized nine target areas within the City of Boston whose boundaries were in most cases the same as those of the corresponding General Neighborhood Renewal Plan areas (GNRPs) designated by the Boston Redevelopment Authority... All areas designated as target areas by ABCD are areas which are commonly recognized as having distinct neighborhood identities, in a city where neighborhood distinctions have historically been important.<sup>8</sup>

Again, only that section of Jamaica Plain relevant to the agency was chosen, yet they claim that their Anti-Poverty Action Councils (APACs) represent areas with "distinct neighborhood identities," yet a portion of the historical neighborhood of Jamaica Plain is left out and that portion that forms the APAC does not truly have a distinct identity. As we demonstrated, it contains several subareas.

Area 1, is that section of the Model Neighborhood Area in Jamaica Plain (map B.7). According to federal guidelines, the Model Neighborhood Area is to contain ten percent of the city's population and is to be located in the area of the city with the most significant problems. The two sections of Boston with the worst poverty and housing conditions are Roxbury and North Dorchester, two predominantly black areas. Two further restrictions led to the inclusion of Jamaica Plain in the Model Neighborhood





Map # B.7

Source: Boston Redevelopment Authority Map # D-36

Area. Washington Park, the Urban Renewal area in Roxbury could not qualify for Model Cities funds. In addition, the area selected was supposed to racially and demographically represent the population of the entire city. An area encircling the Urban Renewal Area was selected to meet these guidelines as well as protect the initial Urban Renewal investments.<sup>9</sup> Area 1 is the only Model Cities area with a substantial white population, bringing the demographic mix close to that of the city as a whole. No definition of what constitutes a neighborhood was included in the guidelines.

The fact that only one small section of Jamaica Plain was included in a special program geared primarily to the black sections of Roxbury and North Dorchester may produce significant planning problems. Area 1 is not included in the BRA defined Jamaica Plain neighborhood planning district. Yet it is part of the earlier Jamaica Plain GNRP and still is part of the Jamaica Plain APAC. To further confuse the job of data collection and analysis, only half of Model Neighborhood Area 1 is in Jamaica Plain as defined by the census. The special treatment of this area sets it off from the rest of Jamaica Plain as a more deprived area and associates it with the poverty areas of Boston, further stratifying the Jamaica Plain neighborhood. Area 1 is also set off from the rest of the Model Neighborhood Area as being the only Jamaica Plain area and as being the only white area.

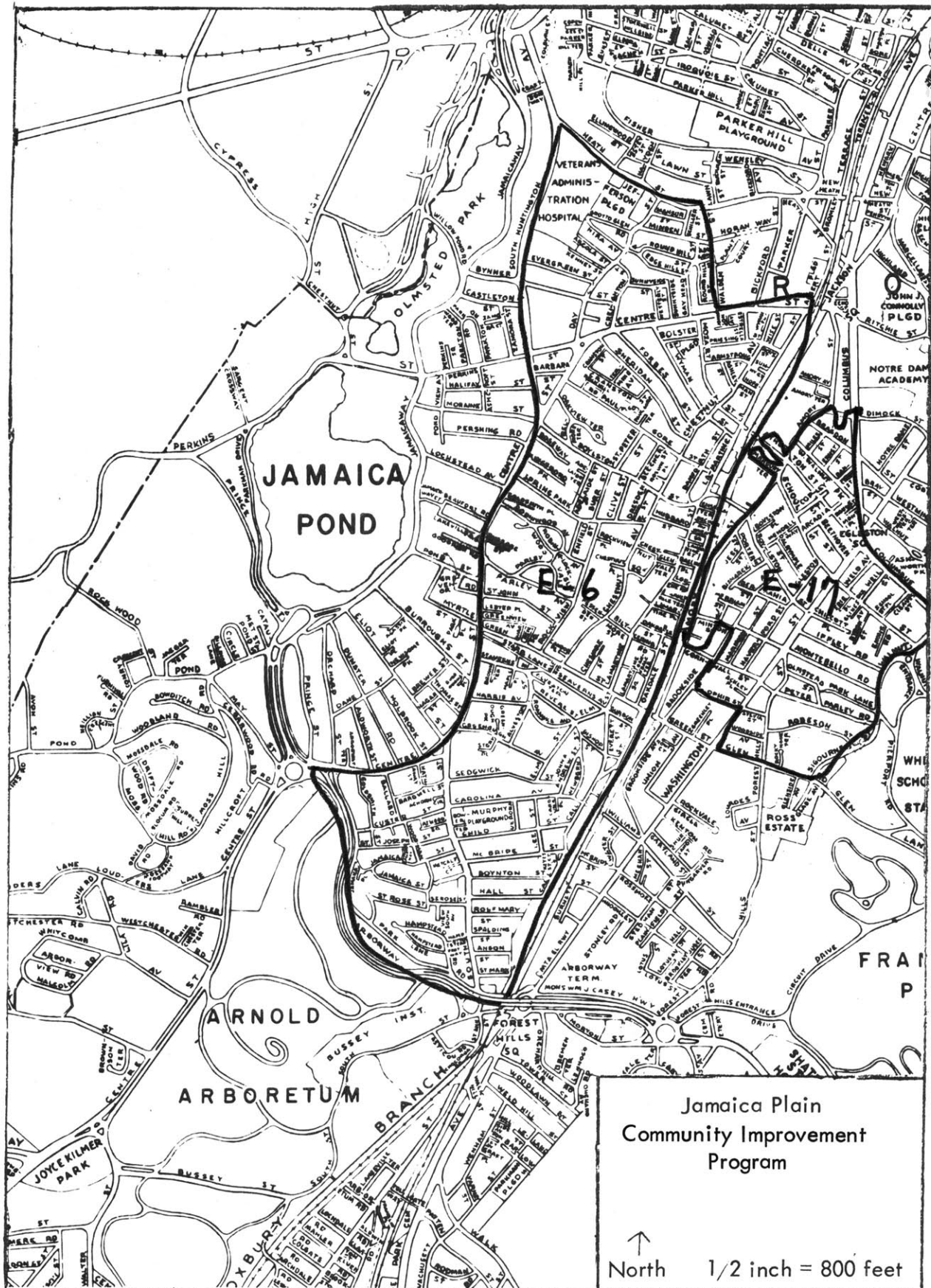
The final special program having an impact on Jamaica Plain is the Community Improvement Program (CIP) under which residents in specifically designated areas of the city may qualify for HUD Section 236 loans and Section 115 grants for housing rehabilitation. The purpose of this program was to stabilize neighborhoods which were beginning



to decline. Two areas in Jamaica Plain were selected to participate in this program. These are labeled as area E-6 and E-17 on map B.8. The areas that were selected to participate in the program contained housing that was beginning to show signs of deterioration but which could be rehabilitated with a minimal amount of expense. The most run-down areas which were being helped through the Model Cities Program and the most well-kept areas which do not require assistance were to be excluded from this program.

Area E-6 borders both the Model Cities area which originally did not qualify because it was too run-down and the more affluent section of Jamaica Plain west of Centre St. which did not require a code enforcement program. Again, this constitutes a stratification of the Jamaica Plain neighborhood into subneighborhoods. These subneighborhoods are: the most deteriorated Model Cities Area, the moderately deteriorated Community Improvement Program Area, the well-kept area constituting the rest of the APAC and the affluent area outside of the bounds of the APAC. Each of the subneighborhoods have been defined and labeled by government programs. This may have a large influence on the reputation of the neighborhood and the reaction of potential residents to it. Each program also has its positive effects of improving and stabilizing declining areas which may prove to be more important in terms of future residents than the stigma attached to the programs.

More recently, the Egleston Square area, E-17, was also selected to participate in the Community Improvement Program, causing an overlap between the CIP area and the Model Neighborhood Area. It was difficult to ascertain how an area could simultaneously be defined as representing the worst of the city's poverty and housing problems and as representing an area with housing requiring a minimal amount of rehabilitation



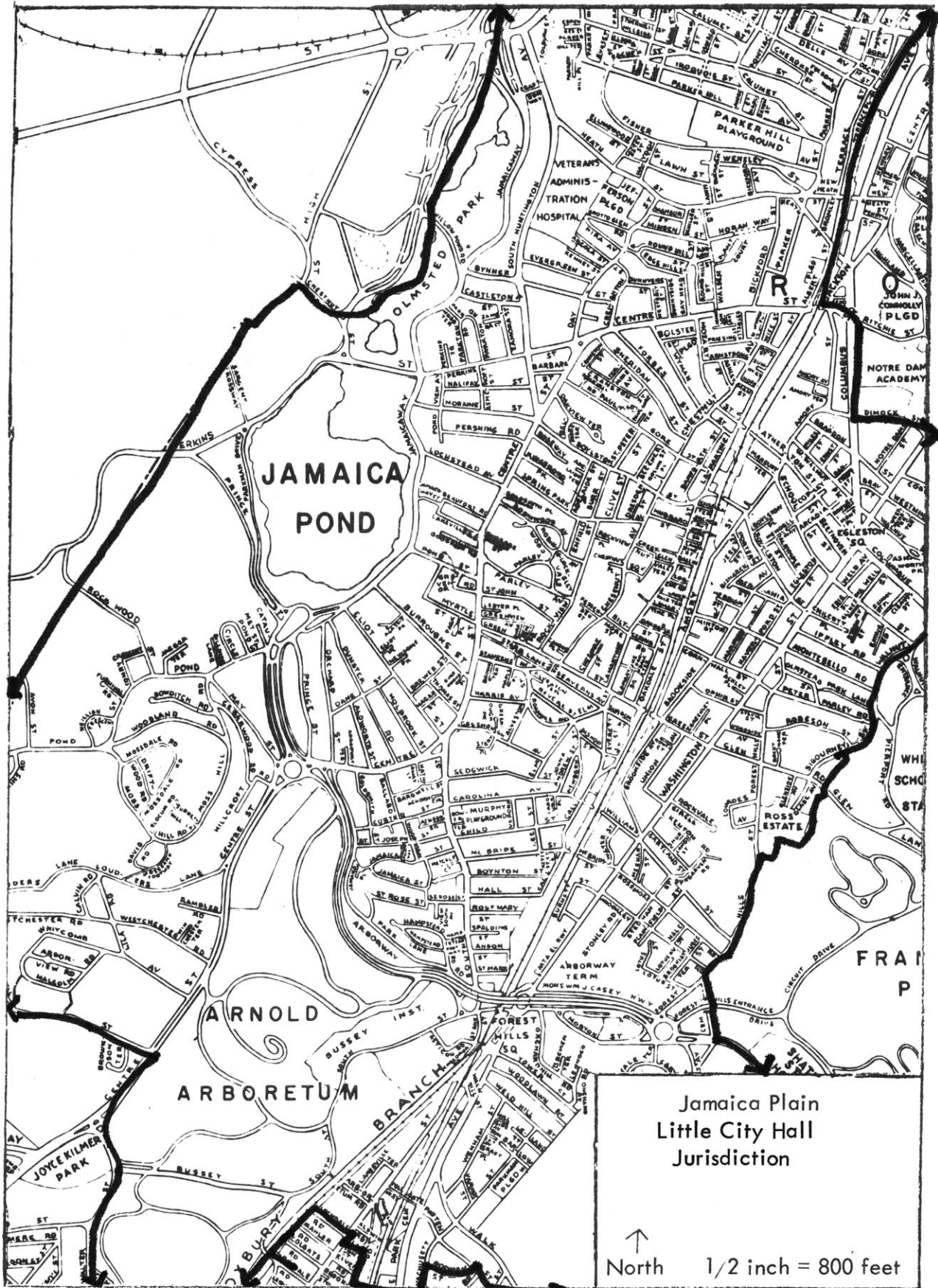
Map #B.8

Source: Boston Redevelopment Authority Map # D-36

to be brought up to code. In addition, the CIP boundaries differ from the Model Neighborhood boundaries so that some sections are the target of two remedial programs both aimed at different types of situations while other nearby areas are treated by only one of these two programs. In addition the programs are administered independently of each other and each could potentially interfere with the other's activities.

Finally, Boston is one of the few cities with a decentralized system of "complaint processing and information distribution."<sup>10</sup> This is carried out through a system of neighborhood based little city halls. One such headquarters is located at 20 South St. in Jamaica Plain and is intended to serve the Jamaica Plain neighborhood (map B.9). An important purpose of decentralized government is to serve the special needs of specific neighborhoods. The assignment of the outlined region on Map B.9 to the Jamaica Plain Little City Hall carries the implicit assumption that the residents of that area have a common set of interests. Because the majority of complaints brought to the Little City Halls are housing related, the boundaries were set according to the routes of housing inspectors. In practice, however, the boundaries are more closely tied to people's needs. Each Little City Hall will serve anybody who calls or walks into the office. The actual building facilities were chosen according to two criteria: 1) where people would be most prone to walk in and 2) according to where a facility was available. The emphasis of those in the downtown office who oversee the program is on the concept of centers which attract a group of people rather than a concern over the edges of jurisdictions.<sup>11</sup>

In practice, the manager of the Jamaica Plain Little City Hall tends to deal with



Map #B.9

Source: Boston Redevelopment Authority Map # D-36

Jamaica Plain as an aggregation of the smaller subneighborhoods mentioned previously as cohesive subneighborhoods because each of these areas has its own needs and problems.<sup>12</sup>

From the above discussion, we may see that although the city of Boston has defined Jamaica Plain as a neighborhood, there is no uniformity in the actual boundaries given to Jamaica Plain by the various city agencies, nor do the boundaries have a grounding in the literature on neighborhood definitions.

## Footnotes: Appendix B

1. Conversation with manager, Jamaica Plain Little City Hall, Summer, 1974.
2. Telephone conversation with Captain John Collins, Public Relations Department, Boston Fire Department, Summer, 1974.
3. Telephone conversation with officer, Informational Office, Commissioners Office, Boston Police Department, Summer, 1974.
4. Ibid.
5. Telephone conversation with Bernard Donnelley, Jamaica Plain District, Sanitation Division, Department of Public Works, Summer, 1974.
6. Telephone conversation with Tom Long, Supervisor, District 2, Highway Division, Department of Public Works, Summer, 1974.
7. Boston Redevelopment Authority, Jamaica Plain General Neighborhood Renewal Plan (Boston: Project No. Mass. R-49, June 24, 1965). p. 6-1.
8. Charles M. Sullivan, Socio-Economic Characteristics of Boston Neighborhoods: Data from the U. S. Census. (Boston: Planning and Evaluation Department, Action for Boston Community Development, Inc., Nov., 1972) p. C-1.
9. Telephone conversation with employee, Model Cities, Area 1, Summer, 1974.
10. Conversation with Robert Fichter, Mayor's Office, April, 1974.
11. Conversation with manager, Jamaica Plain Little City Hall, Summer, 1974.

### Appendix C

#### Public and Private Institutional Influences on Neighborhood Change

Not only are many different public and private sector actors interested in neighborhood change, but they also have a role in the evolution of neighborhoods. Their impact on housing is especially well documented. Their role in changing the characteristics of a neighborhood's population is less direct, generally occurring through the manipulation of the housing stock. Environmental changes, are least well-documented, but the distribution of city services is becoming an increasingly important issue.

The private sector actors who have the largest impact on the housing market are realtors and lenders. Realtors decide to whom they will show homes in each neighborhood. Lenders have control over the availability of mortgage money. Let us now discuss each of these actors in greater detail.

Up until 1950, the National Association of Real Estate Boards (NAREB) adhered to the following code of ethics.

- A realtor should never be instrumental in introducing into a neighborhood a character of property or occupancy, members of any race or nationality, or any individual whose presence will clearly be detrimental to property values in the neighborhood.<sup>1</sup>

The role of the realtor is to match people interested in purchasing or renting a home with vacant units. In this capacity, realtors have an influence over how different groups of people are distributed geographically. In the above code of ethics we can see that realtors have in the past put further constraints on their role as a broker. They also took on the

responsibility of safeguarding the property values in a neighborhood, thus giving themselves a mandate for racial discrimination. Although under the Fair Housing Act of 1968, realtors are required to show all units to minority people, realtors still have maintained some control over the people to whom they show certain units.

The way in which many realtors have had the greatest impact on neighborhood change as opposed to stability which they espouse is through "blockbusting." In very gross terms, the way in which this process works is as follows. A realtor sells one house in a white area to a black household, he then uses various techniques to arouse fears in the rest of the neighborhood. People panic and sell their houses to the realtor at a depressed price. He in turn sells the houses to black households at a much higher price.<sup>2</sup> Realtors also have a more passive role in racial transition. Quite often, when a neighborhood becomes racially mixed, realtors will stop showing houses to white households, again encouraging racial transition.<sup>3</sup> The realtor may then have a marked impact on both the population and housing elements of a neighborhood.

Lenders also play a large role in the future of a neighborhood. An appraiser determines the credit risk of the property before a loan may be granted. According to an article that appeared in The Appraisal Journal,

...the appraiser must be prepared, to the best of his ability to satisfy himself that the obsolescence or decline rate in the neighborhood will be less rapid than the amortization rate of any loan which may be contemplated.<sup>4</sup>

Thurston Ross, the author of the article, listed the following as the factors involved in decline that an appraiser must be able to evaluate: level of turnover, age of building, modernization (adaptability and trend), encroachment (racial and other), time and dis-



tance of facilities, address, and taxes.<sup>5</sup> If the appraiser finds that any of these factors are below the standards he considers free from risk, a loan will not be extended for that property.

This implies that older residential areas or areas undergoing racial change may be considered poor credit risks and as a result be discriminated against by private lenders. When loans are made in "high risk areas," they often entail a large downpayment, high interest rates, and short amortization periods, often forcing borrowers to seek a second mortgage at even more difficult terms. Charles Abrams pointed out that people who are considered a poor credit risk are quite often forced to live up to their reputation because of the expense imposed upon them by mortgage lenders.<sup>6</sup>

These discriminatory lending practices may have an impact on the future of the housing stock in so called "red-lined" areas. Chester Rapkin attributed further deterioration to lack of financing.

Because of the withdrawal of institutional financial support from investments in inner-city properties, transactions are financed in increasing volume through unorganized mortgage channels, and mortgaging becomes difficult. .the flow of new money declines to a trickle, making the replacement of worn-out equipment virtually impossible.<sup>7</sup>

William Grigsby noted that lack of financing leads to lower maintenance and a decline in quality, the consequences the lenders were trying to avoid but instead encouraged.

Grigsby also found that in addition to discouraging investment, a lack of financing could also lead to a shift to absentee ownership and conversions, two characteristics of a declining neighborhood.<sup>8</sup> Conversions produce smaller units and, therefore, quite often cause over-

crowding. Overcrowding, in turn, results in greater wear and tear on the structure and a decline in quality.

As we have seen, lenders may induce changes in the quality, value, tenure, and intensity of use of housing by their lending decisions. Lenders may also force people to remain in a home that no longer suits their needs by not granting a reasonable mortgage on the property for prospective purchasers.

Governmental agencies also play a role in neighborhood change. They must be both responsive to neighborhood change and cogniscent of the changes their actions or inaction may produce. Among the governmental programs which have an effect on housing and may in that way change the neighborhood are highway construction, urban renewal, rent control, code enforcement, and property tax policy.

Both highway construction and urban renewal generally entail demolition and rebuilding. The government, through eminent domain, may reduce the supply of housing in a particular neighborhood, putting pressure on the housing supply in another area. In the case of highway construction and urban renewal, the neighborhoods may be split apart by a new and different land use which may have both positive and negative spillover effects for the surrounding housing market. The structures on either side of the right of way of a highway are downgraded by the noise, fumes, and other externalities imposed upon them by the highway. This may lower the property value of the structures. Even before construction begins, disinvestment often sets in, in anticipation of eminent domain. As maintenance drops, so does the value of the property and the income level of the people willing to live in the

neighborhood. There are also less direct impacts. The people displaced by the road construction must be rehoused, placing increased pressure on the housing supply in the rest of the neighborhood or in other neighborhoods of similar type.

Urban renewal has similar effects on the housing stock, except, rather than replacing the demolished structures with a highway, in the case of urban renewal the replacement may be housing or commercial facilities. There is, however, a time lag between demolition and construction during which people must be relocated. By definition, urban renewal, is undertaken in blighted areas. This means that low-income people must be rehoused. Because of their financial limitations, these people must seek alternative housing in other low-income neighborhoods, perhaps inducing greater densities and an upward pressure on rents. Often the housing built on the urban renewal site is for a higher income group than that which it replaced, again changing the nature of the housing stock. Finally, it is often believed that urban renewal has spill-over effects and leads to the upgrading of surrounding areas. If this is the case, again the quality and value of the housing surrounding an urban renewal area may also change, changing the character of the neighborhood.<sup>9</sup>

Rent control and code enforcement, although enacted to protect the consumer of housing have often resulted in decreased property maintenance. Under rent control, the property owner's income is often kept below that which he would receive in a freer market. If the controlled rent does not allow him to cover his costs, the owner may respond by cutting down on maintenance or even "walking-away" from his investment. The impact on the parameters of housing would be lower quality and a decline in housing values.<sup>10</sup>

Under code enforcement, the owners of residential real estate are required to keep their structure up to a level that is deemed standard. The purpose of this type of program is to maintain the quality of housing. If the income yield of a property is not sufficiently high, the most rational action is for the owner to walk away from his property, not invest in its improvement. This results in the opposite effect.<sup>11</sup>

The last governmental policy we shall discuss is the administration of property taxes. Property taxes are one of the fixed costs associated with a real estate investment. Peterson, Solomon, et. al. found that in many cities, properties are not reassessed even after the value of the property has changed. This means that structures that have dropped in quality and value may still be assessed at their old rate, increasing the expense to the owner. In a declining neighborhood, this can contribute to disinvestment. On the other hand, low assessments may allow for upgrading. Lower fixed costs allow greater returns. The lower expense may also be passed on to consumers in the form of lower rents. Tax policies then may have an impact on both the quality and value of housing.<sup>12</sup>

In each of the above governmental actions, we noted the impact of the action on various aspects of the neighborhood. In addition, knowledge of a neighborhood's dynamics will help in public decision making. Code enforcement is least effective and in fact detrimental in a declining neighborhood. The property tax structure may be molded to a neighborhood's dynamics so as to encourage continued maintenance. In a tight housing market, replacement housing should be provided before any demolition occurs in an urban renewal or highway project.

Although not formally investigated, another critical question is whether the city

changes the level of services it provides to neighborhoods as the population and housing change. It is often hypothesized that simultaneous with lower income occupancy, declining property values, and declining housing quality, also comes a decrease in the level of city services. In addition, there is often an increase in crime and fires and a decline in educational standards in this type of neighborhood. Further investigation is required to determine whether different neighborhoods are serviced differently. If the city does in fact cut down on its service to declining neighborhoods, the city is contributing to the decline.

## Footnotes: Appendix C

1. Charles Abrams, Forbidden Neighbors. (New York: Harper and Bros., 1955), p. 156.
2. For a discussion of Block-busting see: Georgetown Law Journal Editorial Board. "Block Busting." Georgetown Law Journal. October, 1970.
3. See: Anthony Downs, Urban Problems and Prospects. (Chicago: Markham Publishing Co., 1970).
4. Thurston H. Ross, "Market Significance of Declining Neighborhoods," The Appraisal Journal Vol XXIII, no. 2 (April, 1955), p. 204.
5. Ibid.
6. Abrams, p. 173.
7. Chester Rapkin, The Real Estate Market in an Urban Renewal Area. (New York: New York City Planning Commission, February, 1959), p. 44.
8. William Grigsby, "Home Finance and Housing Quality in Aging Neighborhoods," Housing and Economics, Michael Stegman, ed. (Cambridge: M.I.T. Press, 1971).
9. For further discussion of Urban Renewal, see James Q. Wilson, ed., Urban Renewal: The Record and the Controversy (Cambridge: The M.I.T. Press, 1966).
10. For a discussion of rent control and housing decline, see for example: Frank S. Kristof, "Housing: Economic Facets of New York City's Problems," Agenda for a City: Issues Confronting New York, Lyle C. Fitch and Annmarie Hauk Walsh, eds. (Beverly Hills: Sage Publications, 1970), pp. 297-348; and Ira Lowry, ed. Rental Housing in New York City: Volume I, Confronting the Crisis (New York: New York City Rand Institute, February, 1970).
11. For a discussion of the effects of code enforcement see The Baltimore Urban Observatory, The Housing Market and Code Enforcement in Baltimore, July, 1972.
12. See George E. Peterson, Arthur Solomon, et. al. Property Taxes, Housing and the Cities. (Lexington: D.C. Heathand Co., 1973).

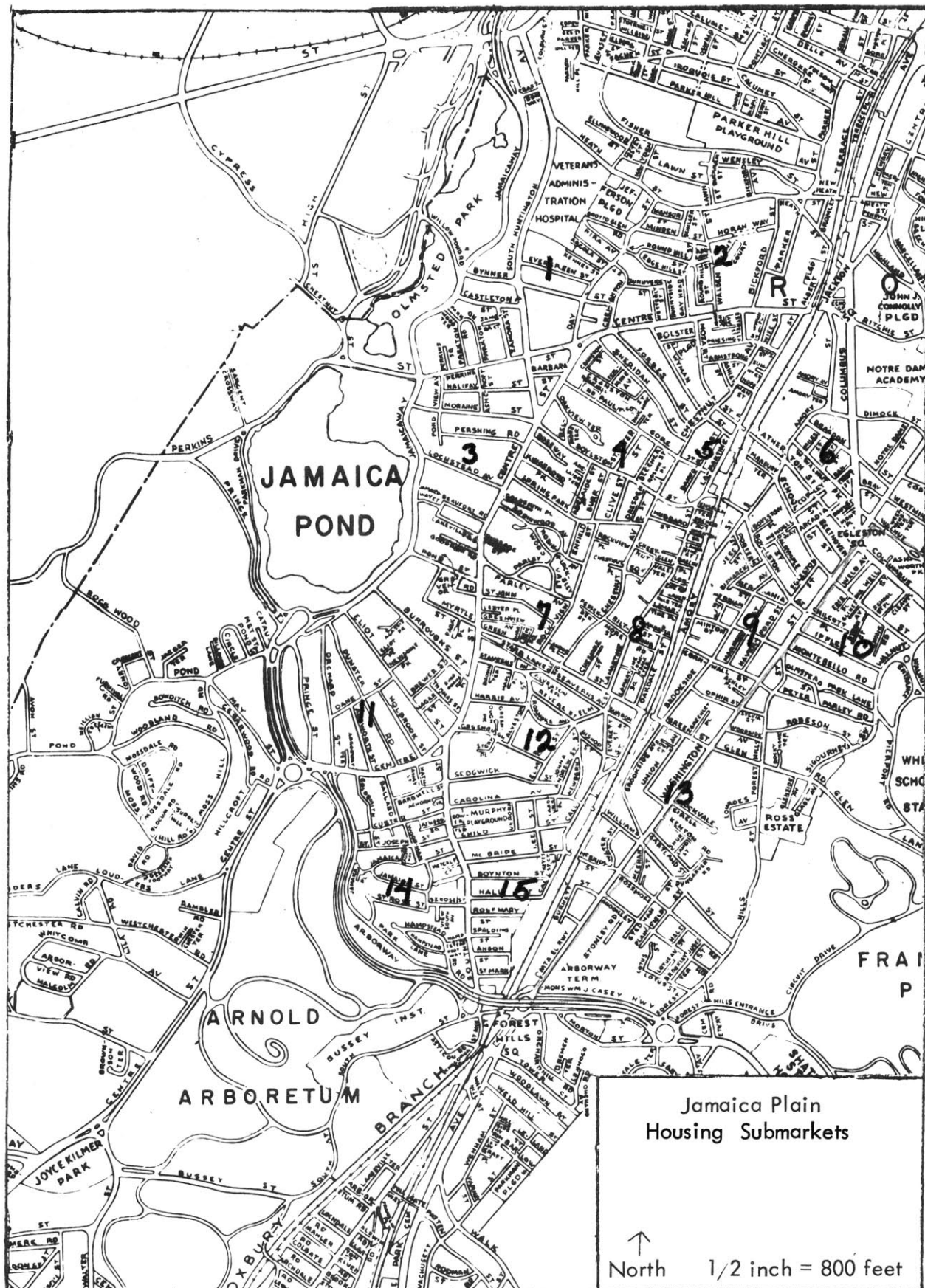
Appendix D

AVERAGE VALUE PER D.U. AND PERCENT CHANGE  
IN JAMAICA PLAIN BY SUBAREAS  
(1953-1955) - (1962-1965)

*			
Sub- Area no.	1953-1955 (1954 Dollars)	1962-1965 (1954 Dollars)	Percent Change (In 1954 Dollars)
1	\$4,233	\$5,168	+ 21.0
2	5,198	5,353	+ 2.7
3	7,471	8,389	+18.5
4	4,778	4,859	+ 1.9
5	3,585	2,489	-30.5
6	4,816	2,927	-39.2
7	6,805	4,854	-28.1
8	4,404	5,985	- 9.9
9	3,587	3,552	- 1.5
10	6,450	4,490	-17.4
11	9,914	10,076	+ 1.6
12	8,151	5,510	-13.4
13	4,435	3,946	-11.0
14	4,968	5,910	+ 19.1
15	3,273	3,605	+ 9.9

\*See map on next page

Source: Appraiser's Weekly  
J. Boland and R. Cady, "Housing Market Study-Jamaica Plain: (1952-55) - (1962-65)," Research Unit, BRA (mimeo).



Map # D.1

Source: Boston Redevelopment Authority Map # D-36



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